

Chapter 5

PHASE 2: THE NATIONAL SURVEY IMPLEMENTATION AND OUTCOMES

PREFACE

When confronted with a questionnaire about the quality of the service they provide, aged care managers – whether they are Chief Executive Officers, Directors of Nursing, or Principal Chefs – are likely to offer optimistic answers. It is human nature to wish to display one's home in the best possible light, even when the survey is anonymous. Further, economic considerations motivate many practitioners; a high quality service is more likely to ensure a full occupancy rate. In addition, there is a range of legislative and regulatory obligations on aged care providers, and it is unlikely that homes which do not comply with their legal responsibilities would admit to such a lapse. For example, as Table 5.7 indicates, 100% of respondent homes claimed that they offered a continence management program as a routine service. It is possible to raise an element of doubt about the veracity of this statistic. On the other hand, it may be true. Any home willing to answer a questionnaire about the quality of the service it provides is probably an exemplar for the industry because it has nothing to hide, or is willing to rectify any errors that may appear in its practices.

The national survey instrument was distributed to 358 nursing homes throughout the country, whose managers had agreed to receive it. A total of

208 were returned, which represented a response rate of 58%. The answers from respondents, which included their views about current practices in aged care, their recommendations for quality improvements, and demographic details about them, appear on the following pages. It is not possible to speculate about non-respondents other than to say that they are located in both Territories and the south east corner of the Australian mainland. They are evenly divided between the private for-profit sector and not-for-profit homes, and there were more multi stage than stand alone facilities. Among responders the majority were stand alone homes.

This chapter focuses primarily on the results pertaining to the clinical indicators which were incorporated into the Australian Quality Matrix, together with items of special interest such as the ethnicity and cultural sensitivity issues raised in Chapter 4. Descriptive statistics are presented first, followed by those associations subject to tests of statistical significance. Frequency tables illustrating the answers to all 50 questions appear in Appendix 7. All have been calculated using the statistical package SPSS Version 6.1 (1996)

A variety of other results, such as differences in approach and priorities to clinical indicators between managerial and bedside registered nurses, have been reported elsewhere (Courtney & Spencer 2000). In addition, the study was conducted in February and March 1999. However, the industry itself has changed somewhat during the 18 months since Phase 2 commenced and the completion of Phase 3 (July 2000), when this chapter was written. These

changes have occurred as a consequence of the introduction of the Commonwealth policy on industry accreditation.

Some items that were of importance when the questionnaire was developed no longer apply. For example, Question 21 raised the matter of resident restraint rates, and a third of all respondents indicated that they did not keep any record of this aspect of care. Standard 4.4 makes it compulsory to do so. Therefore, all of those who indicated that records were not maintained would now be obliged to modify their approach in order to achieve accreditation. Other questions, such as the series on the built environment (Questions 32, 33 and 34), reflected matters which had the potential to be included in the Australian Quality Matrix, but which have been omitted in light of the decision to focus the matrix exclusively on clinical aspects of care. While all answers are reported in Appendix 7, matters that have become less relevant have been excluded from the analysis in this chapter.

RESPONDENT HOMES

As chapters 1 and 2 indicate, nursing homes in Australia usually take one of five different forms: those which stand alone, those co-located with a hostel, those co-located with independent living units (ILUs), those with multiple services including day care centres, and some with other permutations of the above options. This diversity of configurations holds many implications for matters such as economies of scale, the variety of services which can be offered, and even the aesthetics of the gardens which surround the facility. Table 5.1 details the types of homes that responded to the national survey.

Table 5.1 Respondent nursing homes by type (n=204)

HOME TYPE	N	% (rounded)
Stand alone nursing home	110	54.0
Nursing home with hostel only	25	12.5
Nursing home with ILUs only	5	2.0
Nursing home with hostel & ILUs	39	19.0
Other configurations	25	12.5
Missing values	4	

PROPRIETORSHIP

A total of 87 homes (41.8%) were under the management of private-for-profit proprietors. Forty-four (22.1%) were run by church organisations, 46 (22.1%) were run by charitable or community organisations, 23 (11%) were state government homes, and six (2.88%) fell into other categories. Two respondents did not answer this question.

GEOGRAPHIC LOCATION

Of the 358 homes in the national survey 111 (31%) questionnaires were distributed to destinations in New South Wales and the ACT, 109 (30.4%) in Victoria, 64 (18%) in Queensland, 41 (11.4%) in South Australia and the NT, 22 (6.2%) in Western Australia, and 11 (3%) in Tasmania. The proportions were slightly different to those in the study population, as a consequence of removing the case study sites and the homes in which the draft instrument had been pilot tested.

In numeric terms, Victoria was the state that responded best, in the aftermath of the recruitment and follow up procedures. Of the 208 homes that submitted questionnaires 61 (29%) came from Victoria, 54 (26%) from New South Wales, 47 (22%) from Queensland, 28 (13%) from South Australia, 16 (7%) from Western Australia and 7 (4%) from Tasmania. However, in terms of the response rate 73% of Queensland homes and 73% of Western Australian homes returned their questionnaires; 68% of South Australian homes and 63% of Tasmanian homes did likewise. This compares with 56% of Victorian homes and 48% of New South Wales homes which returned survey forms. Neither Territory returned a questionnaire.

It is only possible to speculate about an explanation for this distribution pattern. Perhaps members of the industry in the south-east corner of the mainland receive many requests for participation in studies of this kind, which diminished their inclination to respond. Perhaps the other states were pleased that their opinions were sought. The researcher has a personal connection with Queensland, where she now resides, and Western Australia, where she grew up. Perhaps this contributed to the results. All of the states were visited by the researcher as a consequence of either their participation in the case studies, or during the presentation of conference papers and similar activities.

SIZE

The mean number of beds per respondent home was 62, with a median of 48 and mode of 30. The smallest home contained beds for 10 residents and the largest service 580 beds. The occupancy rate of respondent homes averaged

97.8%, with a maximum of 100% in ten facilities, and a minimum of 24% in one. Of those who answered the question about dementia specific beds (n = 197), 88 (45%) homes had them and 109 (55%) did not.

QUALITY ASSURANCE

At the time of the national survey, Commonwealth accreditation had yet to be commenced, and the certification of buildings was incomplete. However, independently of the Commonwealth standards, the issue of the quality of the service they provide is important to the majority of Australian aged care managers, as the results of the national survey indicate. A total of 113 (56.5%) of all respondents advised that their home had adopted one or another of the range of quality assurance programs available, or employed quality assurance personnel, or both. Programs in this category include the ISO9000 series produced by the Australian and New Zealand Standards Agency, or that run by the Australian Council of Health Care Services - EQUIP.

RESIDENTS IN RESPONDENT HOMES

As a consequence of the *National Strategy for an Ageing Australia* (1997), criteria for admission to nursing homes are sufficiently stringent that, almost without exception, those who gain places in nursing homes require high levels of care. Furthermore, the *Quality of Care for Nursing Home Residents*' project, and its resultant Australian Quality Matrix, were designed to assess the delivery of services to whole populations of high level care recipients, not to individual residents. It is recognised that nursing home populations are made up of collections of individuals, but the matrix was designed to consider

indicators en mass, i.e. total numbers of residents who are restrained, for example, not each individual whose bed is enclosed with rails when they go to sleep. This chapter is confined to reporting on the results of questions asked about the indicators identified initially in Phase 1, and which ultimately became incorporated in the AQM. Using the terminology of Phase 1 informants, these indicators focused on clinical aspects of care such as the rate of pressure ulcer development, activities of daily living such as care of the senses, and factors that influenced residents' social well-being such as contact with the outside world.

However, one of the few areas in which information about individual residents is reported, albeit in terms of nursing home populations, concerns their required levels of care. In respondent facilities the mean number of high level care residents was 49.8 per home, with a median of 40 and a mode of 30. The minimum number of high care residents in a respondent nursing home was two and the maximum 260, with six facilities not answering this question. Low care residents averaged 13.7 per respondent home and low care recipients were distributed in a range which extended from a minimum of nil to a maximum of 320 individuals in respondent homes.

The only other piece of information about individuals sought by the national survey instrument concerns their ethnicity or culture of origin. As Chapter 4 argued, the apparent paucity of attention to the provision of culturally empathic care, particularly for those from non-English speaking backgrounds, produced

disquiet in the researcher. Table 5.2 highlights the ethnic origins of residents by respondent homes at the time of the survey.

Table 5.2 Ethnic backgrounds of residents from respondent homes (n=202)

COUNTRY OF ORIGIN	N (Homes)	%
Predominantly Anglo Celts	178	88.0
Predominantly Aboriginal or Torres Straight Islander	1	0.5
Predominantly European, Mediterranean, or Arabic	8	4.0
Predominantly Asian	Nil	0.0
Mixed ethnic origins	15	7.5
Missing values	6	

STAFF IN RESPONDENT HOMES

FULL TIME OR PART TIME WORKERS

When asked how many registered nurses were employed on a full time basis, the mean number among respondent homes was 2.3 RNs with a median of two and mode of one. Forty-eight (23%) respondent homes employed no full time registered nurses, while one home employed 32. When the same question was posed in regard to part-time registered nursing staff, the mean was 11.2 RNs, median nine, and mode eight. The minimum number of part time RNs employed by respondent homes was one RN and the maximum was 96 part time RNs.

Among other nursing care staff, including enrolled nurses, assistants-in-nursing, and personal care workers, the mean number of full time workers was 3.2 employees per home, the minimum was nil and the maximum was 60. On a part time basis, respondent homes employed personnel in these categories as follows: mean number of care personal 29.1, median 25, and mode 30. The minimum number of part time or casual non RN care staff employed by a respondent home was one and the maximum was 167.

Environmental services or support staff represents the group with the most frequent contact with residents, because they comprise the cleaners, laundry workers, kitchen hands, cooks, gardeners, and handymen or women. The mean number of personnel in these groups employed by respondent homes was 15.27, a minimum of two staff was noted by one facility and the maximum was 72 people. Twenty-eight homes did not answer this question. All support personnel were employed on a permanent part time or casual basis. There were no employees in this category engaged on a full time (38 hours per week) basis.

In residential aged care, allied health professionals are employed under a variety of arrangements: full time, part time, sessions, casuals, or not at all. Categories surveyed in this study included physiotherapists, occupational therapists, podiatrists, activities officers, hairdressers and practitioners of alternative therapies such as massage or aroma. Appendix 7 details the ratios and positions of each of these groups. All but three (1.5%) respondent homes employ at least one physiotherapist under one or another of the arrangements

listed above. Sixty-four (31%) homes did not employ an occupational therapist under any arrangement, while four (2%) homes did not employ a podiatrist. Perhaps surprisingly, given the importance Standard 3.7 places on leisure interests and activities, three (1.5%) homes admitted to not employing any activities personnel. At the other end of the scale, the Phase 3 nursing home allocates over 150 hours a week to diversional therapy for its 60 residents, and offers at least two sessions every day, seven days a week. Eleven homes (5%) do not offer access to hairdressing services, and 60 (29%) homes provide no forms of alternative therapy.

STAFF TURNOVER RATES

The annual staff turnover rate is regarded by the NSW Health Department (1999) as being one indicator of the quality of the service being provided. The higher the rate the more the notion of a quality service is called into doubt. Respondent homes were invited to nominate their annual staff turnover rate in one of four categories: 1-5%, 6-10%, 11-20% and >20%. Only nine declined to answer. Of the remainder, 133 (66.5%) had an annual turnover rate of 5% or less, 46 (23.4%) had a rate between 6% and 10%, 18 (9.1%) fell within category three, and two homes (1%) admitted to turnover rates above 20% in the preceding year.

RECRUITMENT

Staff recruitment is also a useful indicator of the state of the industry, in addition to any reflections it may have on individual homes. Managers were asked about the difficulty they had in recruiting registered nurses or other

classes of employees. Table 5.3 depicts the answers as far as registered nurses are concerned, and Table 5.4 illustrates the answers about other categories of staff.

Table 5.3 Recruitment of registered nurses (n=204)

RECRUITMENT DIFFICULTIES	N	%
Always	47	23.0
Usually	43	21.2
Sometimes	66	32.4
Occasionally	27	13.2
Never	21	10.2
Missing values	4	

Table 5.4 Recruitment of other categories of staff (n=203)

RECRUITMENT DIFFICULTIES	N	%
Always	8	3.9
Usually	23	11.3
Sometimes	81	39.9
Occasionally	41	20.3
Never	50	24.6
Missing values	5	

Recruitment difficulties may be attributable to a wide variety of factors, not least of which is the increased turbulence within the industry arising from the introduction of accreditation. This may account, at least in part, for the fact that almost a quarter of the homes have difficulty in recruiting registered nurses, whose increased responsibilities associated with this policy change make the

job more challenging, according to one DON who wrote in the comments section of the questionnaire:

I cannot remember a time, despite 10 years as a DON, when my RNs have expressed discontent with their work as much as this period getting ready for accreditation.

Respondent from Study Home 193

At the other end of the scale, a quarter of all homes never have any difficulty recruiting environmental or support service staff. The Australian economy overall has been in a growth cycle since the late 1990s, which has afforded increased opportunities for work in a variety of industries. Further, the outlook for residential aged care is less robust as governments focus on care delivery in the community and nursing home career paths are much less certain. In addition, work in places like the laundry of a nursing home presents many challenges, not least in terms of the smells, lack of variety, potential for cross infection and other Workplace Health and Safety hazards. Therefore these results are somewhat surprising.

Regional differences are also a factor. In metropolitan centres recruitment difficulties are more apparent than in rural or remote locations, and these are discussed later in the chapter, because the differences are statistically significant. Differences in recruitment between homes run by commercial proprietors and those run by the not-for-profit sector were also significant, but only when the geographical differences were excluded. Rates of pay and other conditions of employment are determined by State Industrial Commissions, and Awards apply equally to everyone in the industry in any given state. While

managerial staff may be able to negotiate terms of employment which vary between proprietors, this is not an option available to line workers. Hence, there is little to choose between proprietors when electing whether to work in the commercial or not-for-profit sectors and proprietorship is unlikely to influence the employment decisions of many registered nurses. Staff in state run homes are employed under different conditions, which sometimes include greater rates of pay, and almost always include greater numbers of personnel, according to the Phase 1 results. However, there were no significant differences in the answers to this question between state 'owned' facilities and those from the other groups.

STAFF EDUCATION

Staff education levels also hold implications for the quality of the care they deliver (Edwards & Forster 1998). Respondents were invited to indicate approximately what percentage of their RNs had completed or were undertaking university qualifications. Only 66 (34%) homes responded to this question, and 41 said 0%, 15 indicated between 5% and 10% of their staff had completed university credentials, while 10 indicated that between 1% and 5% were undertaking university studies. When asked about specialist gerontology qualifications 52 (25%) respondent homes indicated that one or more of their registered nursing staff had completed programs of this nature.

When asked what percentage of other nursing care staff had completed any formal education, such as the TAFE Certificate Level III program, the mean result was 44%, with 21 homes indicating that 100% of their staff had

undertaken some training. In-service education also plays an important role. When asked how many hours of in-service education full time RNs were expected to undertake each year, the mean was 20.8 hours, median 16 and mode 12. Several respondents made the point that the number of in-service education hours is in proportion to the number of hours worked by individual RNs. One home admitted to only two hours per year and four claimed 100 hours per year (approximately two hours per week). With regard to other categories of nursing care staff, the survey sample overall averaged 19.1 hours per year with the median and mode both equalling 12 hours. Again the minimum was two hours for this category of worker, and three homes claimed their non RN nursing staff were offered 100 hours per year.

The matter of whether or not formal education makes a difference to the quality of the care being delivered was answered with a resounding 'yes'. When asked, 186 (91.8%) nursing home managers answered in the affirmative and 18 (8.8%) said 'no'. Only four declined to answer.

RESPONDENT MANAGERS

The survey instrument investigated the practices and procedures adopted by respondent homes. It also asked a series of questions about the respondents themselves at the conclusion of the questionnaire. This strategy was adopted to avoid attempting any questions of a personal nature, until a degree of trust had been established between the researcher and respondent. However, to enhance the reader's understanding of the personnel who work in respondent homes, a description of the individuals who answered these questions is provided here. It

will be recalled that questionnaires were addressed personally to individuals nominated by the home during the initial approach by phone. By and large these people were managers of either clinical or administrative care, or their nominees.

The ratio of female to male informants was 7:1, with 181 women (88%) and 25 (12%) men completing the questionnaire. The average age of informants was 50 years, with two being born in 1934 (65 years at the time of the survey) and one born in 1975 (24 years). The most frequently occurring birth year was 1953.

Not surprisingly, given the age range, the majority of informants completed their first formal qualification (usually a Certificate of General Nursing) in a hospital school of nursing. One hundred and eighty four (90.6%) fall into this category. Another 16 (8%) completed their first professional qualification in a university, and three individuals completed their first formal training in other places. Five declined to answer. When those who had been trained in a hospital school of nursing were asked if they had completed a transition or conversion course to obtain the equivalent of a university qualification, 91 (51.3%) indicated that they had, and 87 (48.7%) indicated that they had not. Five declined to answer. Furthermore, when they were asked if they possessed specialist training or qualifications in aged care, with no restrictions as to how this was defined, 134 (66%) said they had and 69 (34%) stated that they had no specialised training for the work that they do.

It is suggested that this even division between those who perceived the need to acquire tertiary qualifications and those who did not is a reflection of priorities set prior to the advent of the Aged Care Standards. Standards 1.3, 2.3, 3.3 and 4.3, which cover all aspects of aged care, place high store on the value of education. While some DONs may have 'aged-in-place' along with their residents, and inherited their managerial positions by criteria associated with longevity, the Agency's philosophical focus on continuous improvement will mean that this attitude is anachronistic and probably will not apply by 2003. At that time facilities which achieved accreditation in the first round will be required to repeat the process. By then it is suggested (by the researcher) that all managerial personnel in the aged care industry will be obliged to have obtained, or be working towards tertiary qualifications in management, aspects of gerontology, or other related disciplines, to demonstrate continuous improvement, among other factors.

Irrespective of their initial education, each informant was also asked how long they had worked in aged care: < 12 months, between 1 and 5 years, between 6 and 10 years, and > than 10 years. As Table 5.5 shows, more than two thirds of the sample reported that they had been employed in aged care for over 10 years, and a further 16% for between six and 10 years.

Table 5.5 Years worked in aged care by respondent home managers (n=205)

LENGTH IN YEARS	N	%
Less than 12 months	5	2.4
Between 1 and 5 years	30	14.6
Between 6 and 10 years	33	16.2
More than 10 years	137	66.8
Missing values	3	

The NSW Health Department Reference Group Report (1999), on the estimation of requirements for and supply of specialist registered nurses, highlighted that the aged care workforce was itself ageing, and that its managerial class had been in the service for prolonged periods. The national survey results confirm that longevity in the industry is an Australia-wide phenomenon, not one confined to a single state. They also suggest that, with an average age of 50 years compared with a NSW average of 45 years, the national managerial workforce is somewhat older. If the difficulty of recruiting younger nursing graduates into aged care, reported by the NSW group and confirmed in the national survey results, continues, there is going to be a major shortfall in clinical managers within a decade as the current DONs retire.

PRACTICES AND PROCEDURES

Before any new strategies for high quality care could be introduced, it was essential to learn what were the current practices and procedures for measuring the quality of the care members of the aged care industry deliver. The

Australian Quality Matrix, developed in Phase 3 of the project, identified 18 clinical indicators in four domains of care as a result of the outcomes of Phases 1 and 2. However, at the time that the survey instrument was established the focus was on determining what measures of quality were adopted routinely by Australian nursing homes. Under the guidance of the project's reference group, and following the analysis of the pilot test results from the draft questionnaire, the emphasis of the instrument was placed on items identified by the Phase 1 informants. These included five of the original six clinical indicators and four activities of daily living: pressure ulcer rates, incontinence rates, infection rates, skin integrity, medication errors, resident fall rates, resident restraint rates and staff/visitor accident/incident rates. Respondents were asked 'Do you routinely collect data on the following topics, and if so how frequently?'

Slightly more than half (56%) of all respondents collected statistics on the rates of pressure ulcer development, and two thirds (62%) of those who did reviewed the results on a monthly basis. Given how much importance bedside carers place on low rates of pressure ulcer development the relatively small proportion of homes which collect this information was unexpected. Reasons for this are considered later in the chapter.

In contrast, nearly three quarters (73%) of respondents collected information about incontinence rates, and two thirds (63%) reviewed these data on a monthly basis. Infection rates and statistics related to skin integrity were also collected by approximately three quarters of all respondents (79% and 77%

respectively). However, there were differences in the rates at which these data were reviewed.

Infection rates were assessed on a monthly basis by about three quarters of all those which collect them, while 11% assessed them on a daily basis and 9% on a weekly basis. In contrast, only half (53%) reviewed skin integrity each month and almost a third (30%) did it each day. It is suggested that this is the consequence of the indicator itself. Infections almost always take longer than 24 hours to develop and, even when antibiotics or other treatments are prescribed, they usually take a minimum of five days to subside (Leaver 1999). By comparison, compromises in skin integrity are almost always instantaneous in the case of a skin tear, or apparent within 24 hours in the case of a heat rash or similar condition (Rice 2000). Therefore, this indicator would benefit from a daily review if for no other reason than to assess the effectiveness of any therapy or intervention undertaken to correct the situation.

It is not surprising to note that more than 90% of homes routinely collected statistics on the indicators that carry legal implications. Data on medication errors were assembled by 93% of homes, resident falls by 94% of homes, resident accidents or incidents by 97% of homes and staff/visitor accidents or incidents by 93% of homes. The majority of homes reviewed these statistics on a monthly basis (61%, 67%, 67% and 70% respectively).

As with the routine collection of pressure ulcer data, it was somewhat unexpected that almost a third (32%) of respondent homes did not collect

information on the rates at which they restrained their residents. Among those who did, almost a quarter (24%) reviewed this on a daily basis, and two thirds (63%) each month. Table 5.6 illustrates the results in detail.

The clinical indicator *hydration management*, placed first by the managerial nurses in the case study homes and third by bedside registered nurses, was not reviewed in this context, although it is reflected in residents' skin integrity. The reason for this is that hydration problems should never develop to the point where they can be measured in terms of 'rates'. Individual residents, about whom there is any doubt as to the quality of their hydration program and/or their willingness to drink, are (or should be) placed on a fluid balance chart at the onset of any episode of concern. This has the added advantage of ascertaining their output as well. However, statistics of this kind are filed in the individual residents progress notes, and do not form part of the overall routine data collection of the home, in order to measure quality of care.

PRESSURE ULCERS

One of the interesting features to emerge from this analysis is a reflection of the philosophical approaches evidenced in Phase 1. Chapter 4 indicated that all bedside registered nurses nominated the minimisation of pressure ulcers to be their number one indicator of a high quality service. However, managerial RNs indicated that pressure care and the absence of pressure ulcers was a lower priority for them. It may be assumed that it is the managerial team that determines what statistics are kept, and what indicators of care are monitored routinely. This variation in priority is clearly in evidence in that almost a third

of survey homes (32%) did not monitor the rates of pressure ulcers in their facilities.

Table 5.6 Frequency of data collected routinely on clinical and ADL indicators proposed for inclusion in the Australian Quality Matrix.

INDICATOR	Yes %	No %	Daily %	Weekly %	Monthly %	Yearly %
Pressure ulcer rates	68	32.0	22.4	8.6	62.1	6.9
Incontinence rates	73.5	26.5	16.3	8.1	63.7	11.9
Infection rates	79.8	20.2	11.7	9.1	74.7	4.5
Skin integrity	77.5	22.5	30.8	8.9	53.4	6.8
Medication errors	92.9	7.1	21.4	11.5	61	6.5
Resident fall rates	94.1	5.9	22.1	5.8	66.8	5.3
Resident accidents/incidents	97.5	2.5	23.4	5.6	67.5	3.6
Resident restraint rates	68.0	32	23.6	5.7	63.4	7.3
Staff/visitor accidents/incidents	93.0	7	19.4	3.8	70.4	6.5

INCONTINENCE MANAGEMENT

There is a cost implication for the effective management of incontinent residents which is much higher than that associated with the prevention and cure of pressure ulcers, for example. All assistive devices, whether they are disposable or reusable, are expensive, as is their after-use management. The removal of contaminated disposable pads, or the laundering of reusables, consumes considerable resources, both financial and labour. In addition, as Chapter 2 indicated, the majority of nursing home residents experience some episodes of incontinence, even if it is only that brought on by stress. In the Phase 3 home for example, 42 of the 60 residents required one or another type

of strategy, to ensure that they were dry and comfortable. It may be as straight forward as prompting someone to go to the toilet, or as complicated as the use of indwelling catheters. Whatever the techniques adopted to manage incontinence in nursing homes, it is not surprising that almost three quarters (73.5%) of managers monitor and evaluate their service on a regular basis.

FORMAL PROGRAMS OF CARE

Respondent homes were also invited to comment on the programs they routinely offer their residents who need them or want them, and the frequency with which these activities are monitored or reviewed. While not all are directed towards clinical care, and some were not included in the Australian Quality Matrix, they offer an overall picture of the services provided throughout the country. In addition, their presence or absence may influence the quality of life of individual residents. This applies to programs designed to enhance both clinical and social care. The adequate management of conditions of incontinence is as likely to enhance their daily routine as a program of activities and entertainments, according to some Phase 1 informants. Table 5.7 illustrates the available programs and the frequency with which they are reviewed. However, prior to including that, a brief description of what constitutes a program of care in the pre-eminent areas nominated is given as a useful introduction to these findings. Clinical programs are described first, followed by those that influence a resident's social well-being.

Bowel management programs are offered by 99% of respondent homes. They usually take the form of a written record of residents' evacuation patterns,

coupled with any pharmaceutical or dietary supplements used to encourage or sustain a regular pattern. Physical intervention options such as the use of suppositories or enemas are also recorded. The majority of homes review these on a monthly basis, and medical practitioners are obliged by Standard 2.7 to review their prescribing patterns regularly, by convention at least quarterly.

Individual continence management programs are offered by 100% of respondent facilities for reasons related to those listed earlier in the discussion on incontinence. These usually take the form of a formal assessment of residents' voiding patterns, observed for several days immediately after they are admitted. This is followed by a review of the activities of daily living, which may influence continence. This may include items such as a resident's mobility, usually assessed by the physiotherapist, and dietary and drinking habits and preferences. For example, it may be advisable for some residents to desist from drinking coffee at supper time, because it has a diuretic effect which may predispose them to nocturia. Medical conditions such as dementia also predispose some people to poor bladder control, as do some medications (Fonda 1990).

Nearly 95% of respondent homes claimed they offered programs of pressure area care, although only two thirds indicated that they monitored the rates at which pressure ulcers develop. Pressure care programs are determined according to individual residents' potential risk to succumb to problems. Criteria for what constitutes high and low risk are described briefly in Chapter 6 on the development of the Australian Quality Matrix, and comprehensively in

Appendix 2, in the CHSRA indicators. The interventions themselves will vary and may include: second hourly turning or repositioning for bed or chair fast individuals, massage therapy, daily or more frequent walking programs with the use of aids such as rollators or other devices, chair-robic exercises or other physiotherapy, and similar activities. These will be documented in the care plan which the Commonwealth's Documentation and Accountability Manual (1998) requires to be reviewed not less frequently than every second month.

Non-clinical programs include: activities outside the home, which 87% of respondent homes indicated that they provide; family participation programs, which are offered in 98% of homes; and support for spiritual well-being, which 90% of homes address in one way or another. Activities outside the home comprise exactly what their name suggests. For example, in a home for Greek residents in Melbourne, all those who are fit enough and would like to do so, attend a monthly social event in the Greek Club. This includes a meal, games, and transport to and from the venue. Other activities include regular shopping trips such as those described in Chapter 4 provided by the case study facilities, participation in community events such as *Seniors Week* and comparable undertakings. Each individual resident should have their own program, and a record kept of their participation or disinclination to attend. Forty-five per cent of homes indicated these programs were reviewed each month, and almost as many (43%) reviewed them quarterly.

Family participation programs can also take many forms. Residents are free to invite family and friends to activities provided by the home, such as wine and

cheese nights, barbecues, celebrations of national days, for example, a French menu and party for Bastille Day, and similar events. Family members are encouraged to suggest activities that they or their loved ones would like to join, such as holiday camps, and opportunities are provided on a regular basis for this to occur. In addition, families and friends may be surveyed on a regular basis (for example every six months) to determine whether or not the programs are working. This also affords the opportunity for confidential or anonymous feedback to be given. Almost half (46.7%) of the respondent homes reviewed their family programs each quarter.

The final service to be discussed in this context concerns the provision of programs which support residents' spiritual well-being. While recognising that the notion of spirituality encompasses many dimensions, for the purposes of assessment and review this usually takes the form of a series of worship ceremonies led by a variety of religious or denominational leaders, and conducted at regular, known, intervals. For example, the Catholic priest might visit the home for mass at 11 am, on the first Wednesday in each month. Other spiritual advisors from other faiths would also have routines of this kind. In addition, counselling and other pastoral care can be made available at the request of the resident, at times and places to suit them and members of their family. The opportunity to hear sacred music or read (or be read to from) religious books is also appreciated by some residents. The strategies adopted, to ensure that each resident achieved the degree of spiritual fulfilment to which they aspired, were reviewed by 43.5% of homes each quarter. One word of

caution drawn from the case study informants is worth repeating. A 74 year old man told the researcher in reference to visits from the priest:

I don't want to be bothered with all that 'rubbish'.

Interview 6: 14.1.98

It is common practice for new residents to be invited to nominate their religious affiliation when they are admitted. However, just because someone lists himself or herself as being a member of the Greek Orthodox Church for example, does not necessarily mean that they would like to participate in Greek orthodox ceremonies, or that they would always like to attend the services. High quality care means that a resident's right to choose to attend, or decline to attend, is always respected.

Table 5.7 Programs routinely offered to residents who want or need them, and the frequency with which they are reviewed

PROGRAMS (Alphabetical order)	YES %	NO %	WEEK %	MONTH %	QUARTER %
Activities outside the home	87.1	12.9	11.6	45.3	43.0
Bowel management program	99.0	1.0	30.4	51.5	18.0
Community volunteer program	86.4	13.6	10.5	22.8	66.0
Continence management	100.0	Nil	24.1	57.4	17.9
Falls management	87.4	12.6	23.8	56.5	19.6
Family participation	98.0	2.0	15.2	38.0	46.7
Hydration management	85.6	14.4	40.1	40.7	19.1
Medication regimen review	94.1	5.9	13.2	45.5	40.7
Pressure care program	94.5	5.5	39.2	44.8	16.0
Support program for spiritual well-being	90.5	9.5	19.8	36.7	43.5

DOCUMENTATION

With the advent of accreditation, the importance of documentation for all systemic practices cannot be overstated. However, at the time of the national survey, the significance placed on the written record by residential aged care managers had yet to be demonstrated. Respondents were asked to indicate whether or not their facility had a formal written policy to aid quality control, in a range of areas which had been identified from either Phase 1 informants, the Commonwealth Standards, or the international literature as being important.

Almost all (97%) respondent homes had a formal written policy dealing with complaints, and a similar number (97%) had a written emergency procedure. Manual handling policies were documented by 98% of respondents, a consequence, no doubt, of Occupational Health and Safety legislative requirements. In a similar vein, 94% of respondents had a written infection control policy. This was a requirement of various state health departments or other government instrumentalities well in advance of Commonwealth Aged Care Standard 4.5, and therefore a widespread practice in the industry for several decades. Perhaps surprisingly, given its close association with infection control, more than 12% (n=25) of respondents did not have a written policy on laundry procedures and the handling of clean and soiled linen.

Another unexpected result concerns the matter of resident privacy. As Table 5.8 indicates, almost 94% (N=189) of respondent homes claimed that they had written policies ensuring that residents' privacy was respected. However, Table

4.5 indicates that 43% of case study resident informants considered that they lacked privacy. The response was even more pronounced among family members, where 69% claimed the situation was problematic (see Table 4.6). It is possible that the national survey respondents were not frank about their situation; however, it is equally possible that written policies were not implemented in practice. Table 5.8 illustrates the numbers of respondent homes who do and do not have written policies on the matters being investigated.

Table 5.8 Formal written policies to aid quality control

AREA	YES %	NO %	DON'T KNOW %
Complaints procedure	198 (97.5%)	4 (2%)	1 (0.5%)
Emergency procedure	197 (97%)	5 (2.5%)	1 (0.5%)
Family participation	154 (78.6%)	41 (20.9%)	1 (0.5%)
Food preparation	175 (88%)	19 (9.5%)	5 (2.5%)
Food presentation	156 (79.6%)	33 (16.8%)	7 (3.6%)
Infection control	189 (94.5%)	11 (5.5%)	Nil
Laundry procedures	168 (84.8%)	25 (12.7%)	5 (2.5%)
Manual handling	198 (98%)	4 (2%)	Nil
Privacy	189 (93.6%)	12 (5.9%)	1 (0.5%)

CULTURALLY SENSITIVE CARE

In nations like Australia, residents may be drawn from many countries or cultures of origin. Respondents were asked if their organisation had a formal written policy to support cultural sensitivities in, for example their Mission Statement or Strategic Plan. One hundred and forty-six (71.9%) homes indicated that they had such a policy and 57 (28.1%) indicated that they did not. Three homes declined to answer. When asked 'do you [the managers] encourage residents to express their cultural traditions?' the majority indicated that they did, as Table 5.9 indicates. Nine homes did not answer this question. Explanations for these results are suggested later in the chapter.

Table 5.9 Managerial support for residents to express their cultural traditions (n=197)

SUPPORT CULTURAL PRACTICES	N	%
Always	122	61.9%
Usually	50	25.4%
Sometimes	14	7.1%
Occasionally	8	4.1%
Never	3	1.5%
Missing values	11	

STATISTICALLY SIGNIFICANT ASSOCIATIONS

The national survey instrument was developed to obtain base line data about current practices in the aged care industry. It incorporated a wide variety of topics, which may or may not have been included in the Australian Quality Matrix (AQM). For example, the strategy to determine the optimal frequency of both monitoring and review procedures to minimise pressure ulcer development may have been drawn from the most commonly used practices revealed by the survey respondents. Alternatively, it may have been suggested as a result of statistically significant associations isolated following an analysis of the original data.

This proposal was abandoned for two reasons. First, it was decided to adopt the protocols of the Resident Classification Scale (RCS) to utilise the expertise of existing staff, and to avoid adding any further work to their already heavy schedule. This had the effect of instituting second monthly reviews, as Chapter 6 explains. Using RCS criteria had the ancillary effect of excluding national survey instrument items, such as those related to the built environment, from the AQM, because they do not form part of the RCS assessment (see Appendix 8 for a detailed account of the RCS). Second, as noted earlier, with the introduction of accreditation, the documentation of care practices which may have been undertaken at the discretion of individual DONs or other executives in the past will become mandatory in 2001. Hence, it may have been possible in 1999 for a third of homes to avoid the monitoring and review of practices

such as resident restraints, as Table 5.6 demonstrates. However, Standard 4.4 ensures that it will be obligatory to do so by 1 January 2001.

These factors freed the researcher to investigate other aspects of the information obtained in the national survey of Australian nursing homes. As Chapter 2 highlighted, one of the other issues examined in depth around the world is the relationship between aged care provided by commercial (for profit) proprietors (FP) and that provided by the not-for-profit (NFP) sector. With this in mind, the researcher undertook a series of tests to distinguish between the outcomes of each as they were evidenced in the survey results. The Chi-Square test (χ^2) for relatedness applies to the analysis of relationships between two categorical variables and it became the principal test of significance used in this examination.

Table 5.10 highlights the numbers of homes in each category of respondents. For the purposes of the analysis, all NFP facilities, including those run by churches, charities, or local communities, were combined. This resulted in a sample of 177 respondents, 87 from the FP sector and 90 from the NFP group. The 29 homes with other proprietors, such as state government institutions, were excluded from the analysis.

Table 5.10 Nursing home respondents by proprietor (n=206)

TYPE	N	%
Private, for profit homes	87	41.8%
Not-for-profit homes	90	44.2%
State government homes (including long stay wards in regional hospitals)	23	11.0%
Others	6	3.0%
Missing values	2	

PROPRIETORSHIP AND FORMAL QA PARTICIPATION

Because the study aimed to develop standards to achieve optimal care for those with high level needs, the analysis commenced with an examination of attitudes towards quality assurance at the time of the survey. Question 11 asked respondents ‘has your facility adopted a quality assurance program such as ISO9002 or ACHS/EQUIP. All FP and NFP institutions answered this question as Table 5.11 shows:

Table 5.11 Proprietorship by quality assurance (n = 177)

PROPRIETOR	QUALITY ASSURANCE		
	YES	NO	
For Profit	29	58	87 (49.1%)
Not-For-Profit	69	21	90 (50.9%)
	98 (55.4%)	79 (44.6%)	

$$\chi^2 = 33.6, df = 1, p < 0.0001$$

Table 5.11 demonstrates that Not-for-Profit (NFP) homes undertook formal quality assurance programs more widely than those in the For Profit (FP)

sector, and that the difference was statistically significant, $\chi^2 = 33.6$, $df = 1$, $p < 0.0001$.

An investigation of the types of service, stand alone or multi-stage, among those who had instituted some form of quality assurance training (N = 99) was also completed. It indicated that more stand alone facilities (N = 51) than homes offering multiple services (N = 47) adopted a formal QA program, but that the differences were not statistically significant. This result may also reflect the fact that almost 54% of the study respondents were stand alone nursing homes. An investigation of proprietorship by QA and service type resulted in cells with fewer than five respondents. Therefore, it was considered injudicious to draw any statistically significant conclusions from the outcome.

STAFF TURNOVER

The NSW Health Department (1999) recognised that staff turnover rates were another indicator of quality of care. One of the factors highlighted in Chapter 4 was the workload apparently expected of registered nursing staff in the not-for-profit sector. Participant observation sessions had appeared to demonstrate that this group performed many hours of unpaid overtime. While the questionnaire did not distinguish between RN turnover rates and others, it might be assumed that, if personnel were dissatisfied, the most likely strategy available to them would be to 'vote with their feet' and move to another employer. Table 5.12 suggests that this may be happening.

In general the turnover rate does not appear to be excessive. More than three quarters (77%) of the private for-profit homes indicated that their turnover rate was less than 6% in 1998. This compares with just over half in the not-for-profit sector. Furthermore, only 10% of FP homes had staff turnover rates between 6% and 10%; however, 29% of homes in the NFP group had turnover rates of this magnitude. The difference between the sectors was statistically significant, $\chi^2 = 9.3$, $df = 2$, $p = 0.009$. The groups were almost identical in the higher range between 11% and 20%, 10.3% in the FP group and 10% in the NFP group. The two homes that admitted to more than 20% staff turnover during 1998 were state run facilities and therefore were excluded from this analysis.

Table 5.12 Proprietorship and staff turnover rates (n=175)

PROP	STAFF TURNOVER RATES			
	1-5 %	6-10%	11-20%	
For Profit	67	9	9	85 (48.6%)
Not-for-Profit	55	26	9	90 (51.4%)
	122 (69.7%)	35 (20%)	18 (10.7%)	

$\chi^2 = 9.3$, $df = 2$, $p = 0.009$

Missing values = 2

RN RECRUITMENT

A related matter to staff turnover concerns staff recruitment. Later in the chapter, the influence of geographic location on staff recruitment is discussed. However, the matter of differences in recruitment between the sectors will be considered first. Because the issue of overwork was recognised to apply only to registered nurses in the not-for-profit sector, for reasons detailed in Chapter 4, the analysis focused on the difficulties each of the two sectors had in recruiting RNs into their workforce. Table 5.13 details the findings.

Table 5.13 Proprietorship and RN recruitment (n=177)

PROP	RN RECRUITMENT DIFFICULTIES					
	ALWAYS	USUALLY	SOME-TIMES	OCCASIONALLY	NEVER	
FP*	29	10	20	20	8	87 (49.2%)
NFP*	20	19	41	Nil	10	90 (50.8%)
	49 (27.7%)	29 (16.4%)	61 (34.5%)	20 (11.3%)	18 (10.2%)	

(* FP = For-profit homes, NFP = Not-for-profit homes)

$$\chi^2 = 31.85, df = 4, p < 0.001$$

When all categories of answers are considered, the differences between the sectors are statistically significant ($\chi^2 = 31.85, df = 4, p < 0.001$). However,

when the first two categories are considered separately, this difference disappears. Approximately 45% of FP homes 'always' or 'usually' experience difficulty in recruiting RNs, as do 43.3% of NFP homes. It would seem, however, from Table 5.12, that the NFP group has greater trouble retaining the staff they recruit.

The recruitment, orientation, and familiarisation of staff is an expensive process in terms of time, labour, money and other resources, and it is wasted if personnel do not stay. It was noted above that, from the perspective of bedside RNs, there is little to distinguish between the employment conditions each sector offers in terms of payment, holidays and similar characteristics because they are determined by state or territory awards. Therefore, the explanation must lie elsewhere. One option, the apparent level of work required by NFP employers of their employees, has been canvassed at length. Others nominated include differences in educational levels between the two groups, and time management skills.

If the NFP sector is to reduce its turnover rate and minimise the difficulties associated with RN staff recruitment, several options are available. Principal among the suggestions would be active support for formal staff education, possibly by subsidising enrolment in courses, arranging rosters to permit attendance at lectures, or paying for personnel to attend industry conferences, seminars and the like. Other options include investigating the workloads assumed by their RNs, and modifying their rostering or payment protocols to

rationalise the loads. Alternatively, in-service lectures on time management skills and the ability to delegate lower level duties are other possibilities. If personnel have the skills to manage their workloads more successfully, and are encouraged to expand their education and knowledge, it seems less likely that they will seek alternative employers or work in other industries.

MANAGERIAL PRACTICES

The influence of the manager on the quality of care delivered, and contentment or otherwise of staff and residents, is paramount. It was noted earlier, that the roles of manager and proprietor are often juxtaposed, particularly in the FP sector. Even in the NFP sector, the Clinical Services Manager, for example, will have close associations with the facility Board or Diocesan Chairperson, or their equivalent. Two features of the individuals who responded on behalf of their homes were examined to investigate whether there were any differences between executives in the FP and NFP sectors of the aged care industry. Length of service may be one indicator of consistency and stability in an organisation. In addition, international best practice suggests that levels of education or training are indicative of the approach of an individual to his or her occupation (Zollo 1998). To operate at optimal levels of efficiency and competence, it is self evident that individuals must understand contemporary issues and practice. Therefore, national survey respondents were examined for both characteristics. Table 5.14 illustrates length of service and Table 5.15 the proportions of managerial personnel with specialist gerontological training.

Table 5.14 Proprietorship and respondent length of service (n=174)

PROP	DON LENGTH OF SERVICE			
	1-5 YEARS	6-10 YEARS	>10 YEARS	
For Profit	20	10	54	84 (48.3%)
Not-for-Profit	10	30	50	90 (51.7%)
	30 (17.24%)	40 (23%)	104 (59.8%)	

$$\chi^2 = 13.29, df = 2, P = 0.0013$$

Missing values = 3

The differences between the two sectors are statistically significant, $\chi^2 = 13.29$, $df = 2$, $P = 0.0013$, with 88% of managers in the NFP group having worked six or more years in aged care, compared with 76% of managers in the FP sector. Notwithstanding the statistical significance of the results, it is evident that the majority of managers in aged care are in it for the long term, a reassuring outcome for those interested in industry stability.

Table 5.15 Proprietorship and specialist gerontological qualifications (n=177)

PROP	SPECIALIST QUALIFICATIONS		
	YES	NO	
For Profit	47	40	87 (49.2%)
Not-for-Profit	67	23	90 (50.8%)
	114 (64.4%)	63 (35.6%)	

$$\chi^2 = 8.04, df = 1, P = 0.004$$

In question 47 respondents were asked 'Do you have any specialised training or qualifications in aged care?' Respondents were free to define the 'specialised training' in whatever terms they preferred, but case study DONs included courses run by the Royal College of Nursing Australia, or the education division of professional associations in this category. As Table 5.15 indicates, the differences between the two sectors are statistically significant $\chi^2 = 8.04$, $df = 1$, $P = 0.004$, with two thirds of NFP managers and half of FP managers having specialist training in aged care. (Among those 31 DONs excluded from this analysis because they worked outside the two sectors under consideration, Appendix 7 demonstrates that a further 20 (64%) also had gerontological training, additional reassurance for those interested in managerial standards in the aged care industry.)

CULTURALLY SENSITIVE CARE

One final feature of the analysis comparing results from the FP sector of the aged care industry with those from the NFP sector concerns the matter of culturally sensitive care. The NFP group proved to be considerably more attuned to this matter than their commercial counterparts. Question 31 asked the respondents: 'Do you as an individual, encourage residents to express their cultural traditions?' The question included an illustration. It said: 'For example, would you permit the performance of an Aboriginal smoking ceremony (a form of exorcism) following the death of an Aboriginal resident?' This example had been presented to the researcher by several of the case study DONs during Phase 1 of the project. Table 5.16 illustrates the national survey findings.

The differences between the sectors are statistically significant, $\chi^2 = 29.87$, $df = 4$, $P < 0.0001$, and several factors are likely to contribute to this outcome. First, it is not surprising that the church and charitable sector would express high levels of support for the suggestion that it accommodate the cultural traditions of its residents. What is surprising is that none of them admitted to any qualification of their views. For example, one DON from a FP home told the researcher that she would be willing to accommodate the traditions of one of her residents, provided there was agreement from the rest of them, and that none of the traditional practices caused the others discomfort or distress.

This may not have been possible in the smoking ceremony described to the researcher because, not only was the room in which the resident had lived, purged, but also the dining room, recreational centre, and any other place in which the resident had spent considerable time. As the home concerned had a predominantly Aboriginal population and was administered by a state health department, the ceremony presented few problems. However, in the view of the researcher the reservation expressed by the FP DON is a perfectly reasonable one.

Table 5.16 Proprietorship and the expression of cultural traditions (n=164)

PROP	EXPRESS CULTURAL TRADITIONS					
	ALWAYS	USUALLY	SOME-TIMES	OCCASIONALLY	NEVER	
FP*	31	30	10	2	1	74 (45.1%)
NFP*	71	19	Nil	Nil	Nil	90 (54.9%)
	102 (62.19%)	49 (29.87%)	10 (6.09%)	2 (1.21%)	1 (0.6%)	

$$\chi^2 = 29.87, df = 4, P < 0.0001$$

Missing values = 13

(* FP = For-profit homes, NFP = Not-for-profit homes)

Another facility that contributed to this debate was the multicultural home which participated in the national survey pilot test. It accommodated residents from diverse cultural backgrounds, but the DON did not consider the issue of observing many different traditions to be a problem. His home was located in a capital city, administered under the auspices of an incorporated charitable body, and its residents came predominantly from European backgrounds. While there were many differences in religious and cultural affiliations and practices observed by them, none was so unfamiliar as to cause disquiet.

Another matter to consider is the 13 missing values from this answer, all from the FP group. This represents a high level of non-responders; even the question

about age garnered more replies. It is possible that the FP managers elected to provide an 'informal' answer rather than comment on a question containing connotations with which they were not familiar, for reasons that are detailed next.

Another explanation may be geographic location. Among FP respondents, there were proportionately more homes in metropolitan or urban settings than in rural or remote areas. As a consequence it is possible that FP managers, as a group, are exposed to fewer individuals from non-mainstream backgrounds, for several reasons. Culture specific homes are also likely to be located in metropolitan areas for reasons of supply and demand, as are multicultural homes. It is probable therefore that residents, unhappy in mainstream metropolitan homes for reasons associated with their culture, would seek a transfer to facilities more sympathetic with their traditions. In addition, those seniors from non-English speaking backgrounds, who reside happily in mainstream homes are likely to have spent many years in Australia, having migrated here after the second world war, for example. They may have adopted many of the host culture's traditions, or at least become familiar with them. Therefore city based residents, staff, and managers are less likely to be confronted with unfamiliar cultural traditions than those in other localities.

While the majority of NFP homes are also found in urban centres, there are more NFP homes in all geographic locations for reasons related to government policy. At least until the advent of the GST, NFP homes in smaller centres

received considerable Commonwealth subsidies to support community based nursing homes and their local inhabitants, as Chapter 1 indicated. In addition to Aboriginal Australians, this might also include ‘pockets’ of residents from non-English speaking backgrounds, reluctant to leave the community in which they have lived. For example, there is a relatively large group of elderly Italians in central Queensland who, in the past, migrated into the area to work in the cane fields. Therefore, in Bundaberg and towns in close proximity to the sugar industry it would not be unexpected to have people from this group making up a larger proportion of nursing home residents than might be the case in Alice Springs, for example. Another explanation is that homes in rural and regional centres, which draw from the surrounding populations, are also more likely to be familiar with the customs and traditions of their local populations, irrespective of where they originated. For example, almost everyone who resides in Woolgoolga on the NSW northern coast would be exposed to Indian cuisine, because there is a high proportion of Sikhs living there. Therefore, any nursing home manager in that location would be likely to have come into contact with this tradition and be able and willing to meet the expectations of elderly locals with this background thereby contributing to their quality of life as well as the quality of their care.

GEOGRAPHIC LOCATION AND RN RECRUITMENT

It was noted several times earlier in the chapter that geographic location had a major impact on the availability of trained staff, one of the factors influencing quality outcomes for residents. Managers who had greatest difficulty in

recruiting RNs were those in metropolitan centres. When the analysis was confined to an examination of only the FP and NFP facilities there were several cells with too few respondents to infer with confidence any implications from the results. The same reservation applies when the whole study sample (N = 208) is included. However, for the purpose of highlighting the situation and identifying a possible trend, Table 5.17 demonstrates these results. Further, as Chapter 8 suggests, it may be a matter for more thorough investigation during the multi state multi centre trials of the AQM.

Three categories of geographic location were identified: metropolitan, regional, and rural communities. They were defined according to postcodes, taking into account population size. So, for example, homes from suburban Newcastle in NSW were classified as 'metropolitan', whereas Gympie in Queensland was considered 'regional', despite the fact that they are both approximately two hours drive from their respective capital cities. Centres with fewer than 10,000 permanent residents, more than 500 kilometres from their capital cities, were classified as 'rural'. So, for example, Broome in Western Australia would be considered 'rural' for the purposes of this analysis, although during the tourist season the population rises to over 15,000, and there is more infrastructure in place to meet this demand than a comparable town such as Whyalla in South Australia, which would have also been classified as 'rural'.

Table 5.17 Geographic location and RN recruitment (n=206)

LOCATION	RN RECRUITMENT DIFFICULTIES					
	ALWAYS	USUALLY	SOME-TIMES	OCCASIONALLY	NEVER	
METRO	38	38	20	Nil	Nil	96 (46.6%)
REGIONAL	10	Nil	30	20	10	70 (33.9%)
RURAL	Nil	Nil	20	10	10	40 (19.4%)
	48 (23.3%)	38 (18.4%)	70 (34.1%)	30 (14.5%)	20 (9.7%)	

$$\chi^2 = 124.6, df = 8, P < 0.0001$$

Missing values = 2

SUMMARY OF STATISTICALLY SIGNIFICANT FINDINGS

This examination of the results obtained from homes in the private for-profit group compared with those in the not-for-profit sector revealed several differences. The NFP group participated in more formal quality assurance programs than did their contemporaries in the FP system. In contrast, FP homes had lower staff turnover rates than their counterparts, and a series of explanations was offered to account for these differences. Differences in RN recruitment were also significant although, as indicated above, the matter is more one of geographic location than the proprietorship of the home. Over two thirds of metropolitan homes 'always' or 'usually' had difficulty recruiting RNs, irrespective of their proprietor.

One result, while being statistically different, in fact demonstrated considerable similarity. More than three quarters of all DONs in both sectors of the industry had worked six or more years in aged care. Other areas revealed considerable differences however. For example, two thirds of NFP DONs had specialist training in aspects of aged care, compared with half of FP managers. In addition, there was considerable discrepancy between the two sectors in regard to culturally sensitive care. Slightly more than one third (34%) of FP DONs 'always' or 'usually' encouraged their residents to express their cultural traditions, compared with 100% of DONs in the NFP sector who made that claim. Explanations were offered to account for these differences.

SYNOPSIS

The national survey was conducted to learn about the current residential aged care industry, its participants and practices, as they applied in the first quarter of 1999. The importance of policies such as industry accreditation have overtaken these events to some degree, modifying both personnel and procedures in their wake. However, as proposed, the national survey instrument provided the means by which base line data were obtained, and influenced in multiple ways the evolution and implementation of Phase 3 of the study. This comprised the development, trial and evaluation of a draft Australian Quality Matrix (AQM) of clinical care.

National base line statistics were reported in this chapter, together with some statistical inferences drawn from the unstructured data. In particular the

differences detectable between the characteristics of the private for-profit sector compared with those in the not-for-profit group were examined. Many others were possible; however, only those that acted as a signpost to the development of the AQM have been reported here. The following chapter describes the processes that led to the maturation of the matrix. Then Chapter 7 provides an account of the trial and evaluation of the draft model of the Australian Quality Matrix and its indicators for optimal clinical care.

Chapter 6

THE DEVELOPMENT OF AN AUSTRALIAN QUALITY MATRIX OF CLINICAL CARE

PREFACE

As discussed in chapters 1 and 2, quality indicators and a quality monitoring system developed for use in a regulatory process offer a potential quality improvement instrument for nursing home staff. The systematic use of resident assessment data can aid in the identification of quality of care problems, and provide guidelines for their possible solution. In the United States, for example, the Federal Government's Minimum Data Set formed the foundation for a range of systems adopted by a variety of states. The Center for Health Systems Research and Analysis (CHSRA) at the University of Wisconsin, which assisted in the development of these instruments in six states, made extensive use of the MDS, as discussed in Chapter 2.

The present project modified the care domains of the accreditation standards to form the backbone around which the study was built. However, its outcome, the Australian Quality Matrix (AQM), adopted the Resident Classification Scale (RCS) measurement criteria or descriptors as the primary means to define the clinical indicators of quality care, not least because at present, the data collected are only used for funding purposes. Further, as it is already obligatory for care staff to collect this information, the introduction of its use to monitor and evaluate indicators of quality would involve personnel in only

minimal additional work, an important consideration when current workloads are taken into account. While the RCS applies to all residents in Australian aged care facilities, the AQM was developed to review the quality of care for residents with high levels of need and who reside in nursing homes rather than any other types of accommodation such as hostels, independent living units and the like. Furthermore, the indicators it contains were designed to apply to all nursing homes in Australia. They have equal applicability irrespective of the diagnoses and conditions represented in the nursing home populations. They were not designed for application to individual seniors although, of course, the national nursing home population is made up of aggregates of individual people. It is also recognised that indicators of quality care may be developed in a variety of ways. However, as stated in Chapter 3 a quantitative approach was considered necessary to ensure indicator replicability across the country. Therefore, the inclusion criteria for AQM indicators were that they be measurable.

CHSRA QUALITY INDICATORS

It was noted in Chapter 2 that the CHSRA quality indicators played a pivotal role in the development of the Australian Quality Matrix. In particular the CHSRA measurement criteria were influential where an absence of RCS descriptors made the definition of some Australian indicators a challenge. Table 2.1 in that chapter provides a summary of the current version of the CHSRA indicators, and notes that over the past five years they have been the subject of several revisions. At present there are 24 indicators covering 11 domains of care in the Wisconsin model, and they are described here in detail,

to enable the reader to understand the importance of this structure in the evolution of the AQM. (The spelling utilised throughout this and subsequent chapters when quoting CHSRA is that of the CHSRA document itself i.e. American English.)

CHSRA CARE DOMAINS

The 11 domains of care in the CHSRA (2000) model comprise accidents, behavioral/emotional patterns, clinical management, cognitive patterns, elimination/incontinence, infection control, nutrition/eating, physical functioning, psychotropic drug use, quality of life, and skin care. They are detailed in full in Appendix 2.

The first domain is *Accidents* and indicator number 1 consists of the *incidence of new fractures*. The numerator utilised to achieve this is, ‘all residents with new fractures on most recent assessment’, and the denominator consists of ‘residents who did not have fractures on the previous assessment’. This indicator was developed without adjustment for risk. Indicator 2 also belongs within the first domain. It is the *prevalence of falls*. It was created with a numerator that comprised ‘residents who had falls on most recent assessment’, divided by ‘all residents on most recent assessment’. It too did not require adjustment for risk.

The second CHSRA domain is *Behavioral/Emotional Patterns*, and indicators 3, 4, and 5 are all located within this domain. Indicator 3 is the *prevalence of behavioral symptoms affecting others*. It was created with the numerator

'residents with behavioral problems affecting others on most recent assessment' divided by 'all residents on most recent assessment'. The risk adjustment for this indicator is extensive and can be found in Appendix 2. Indicator 4 is the *prevalence of symptoms of depression*. It was calculated with a numerator of 'residents with symptoms of depression on most recent assessment' divided by 'all residents on most recent assessment'. A description of the symptoms of depression is also incorporated in Appendix 2, and there was no risk adjustment for this indicator. Indicator 5 comprised the *prevalence of symptoms of depression without antidepressant therapy*. Indicator 5 was calculated with a numerator of 'residents with symptoms of depression on most recent assessment and no antidepressant therapy' divided by 'all residents on most recent assessment'. Risk adjustment was not computed for this indicator.

The third domain comprised *Clinical Management* and the indicator (number 6) consisted of the *use of 9 or more different medications*. It was calculated with a numerator of 'residents who received 9 or more different medications on most recent assessment' divided by 'all residents on most recent assessment'. No adjustment was made for risk.

The fourth domain consisted of *Cognitive Patterns*. It too contained only one indicator, number 7, which is described as the *incidence of cognitive impairment*. Its description incorporates a numerator of residents who were 'newly cognitively impaired on most recent assessment' divided by 'residents who were not cognitively impaired on previous assessment'. A detailed

account of 'cognitive impairment' is found in Appendix 2. There was no adjustment for risk.

There are four indicators associated with the next care domain *Elimination / Incontinence*. Indicator 8 consists of *the prevalence of bladder or bowel incontinence*, calculated with a numerator defined as 'residents who were frequently incontinent on most recent assessment' divided by 'all residents except those noted in exclusion'. Excluded residents comprised those who are comatose, or have an indwelling catheter, or who have an ostomy on most recent assessment. Risk adjustment was made for high and low risk residents, the details of which are described in Appendix 2. Indicator 9 consists of the *prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan*. This indicator is calculated with a numerator that consists of 'residents without a toileting plan on most recent assessment' divided by 'residents with frequent incontinence of either bladder or bowel on most recent assessment'. Risk adjustment was not undertaken on Indicator 9. Indicator 10 comprises the *prevalence of indwelling catheters*. It is calculated by dividing the number of 'residents with indwelling catheters on most recent assessment' by 'all residents on most recent assessment'. No risk adjustment was incorporated in Indicator 10. The final indicator in this domain, number 11, consists of the *prevalence of fecal impaction*. It is calculated with a numerator that consists of 'residents with fecal impaction on most recent assessment' divided by 'all residents on most recent assessment'. Adjustment for risk was not undertaken for this indicator.

The next domain is that of *Infection Control*. There is only one indicator in this category, number 12. It comprises the *prevalence of urinary tract infections* (UTIs). It is calculated by dividing 'the number of residents with UTIs on most recent assessment' by 'all residents on most recent assessment'. Risk adjustment was not necessary.

Nutrition/Eating is care domain number seven. It contains three indicators, numbers 13, 14, and 15. Indicator 13 consists of the *prevalence of weight loss*. It is calculated by dividing 'the proportion of residents with weight loss of 5% or more in the last 30 days, or 10% or more in the last 6 months, on most recent assessment' by 'all residents on most recent assessment'. Risk adjustment was not undertaken for this indicator. Indicator 14 comprises the *prevalence of tube feeding*. It is determined by dividing the number of 'residents with tube feeding on most recent assessment' by 'all residents on most recent assessment'. There was no risk adjustment on this indicator. The final indicator in this domain, number 15, is the *prevalence of dehydration*, in which dehydration is defined as 'output exceeding intake'. Its calculation is straightforward, 'the number of residents with dehydration' divided by 'all residents on most recent assessment'. Adjustment for risk was not included.

The next domain is that of *Physical Functioning* and it contains three indicators, numbers 16, 17 and 18. Indicator 16 comprises *prevalence of bed fast residents*, which is calculated by dividing the 'number of residents who are bed fast on most recent assessment', by 'all residents on most recent assessment'. No adjustment for risk was necessary. Indicator 17 comprises the

incidence of decline in late loss ADLs. Late loss ADLs includes bed mobility, transfers, eating and toileting. This indicator is calculated in one of two ways. Residents who reveal ADL decline in self-performance between the previous and the most recent assessment either by one level of decline in two or more ADLs, or two levels of decline in one or more late loss ADLs. The denominator in either case comprises all residents who have had the most recent and the previous assessments, excluding those who could not decline because they were already totally dependent or who were comatose on the previous assessment. Risk adjustment for this indicator, included in the original MDS+ version, could not be defined because certain information was not available on the new MDS 2.0 quarterly assessment. Indicator 18 is described as the *incidence of decline in [the resident's] range of movement (ROM)*. This indicator is calculated with its numerator comprising 'residents with increased functional limitation in ROM between the previous and most recent assessments' divided by 'all residents with previous and most recent assessments excluding residents with maximal loss of ROM at previous assessment'. As with indicator 17, risk adjustment could not be defined because certain information was not available on the MDS 2.0 Quarterly.

Psychotropic Drug Use is the ninth care domain in the CHSRA model, and it contains three indicators, numbers 19, 20, and 21. Indicator 19 consists of the *prevalence of antipsychotic drug use in the absence of psychotic and related conditions*. It comprises the 'number of residents receiving anti psychotic drugs on most recent assessment' divided by 'all residents on most recent assessment except those with psychotic or related conditions'. Risk adjustment is divided

into those at high risk and those at low risk, and is detailed in Appendix 2. Indicator 20 consists of the *prevalence of anti anxiety/hypnotic drug use*. It is calculated by dividing 'residents who receive anti anxiety or hypnotic drugs on most recent assessment' by 'all residents on most recent assessment, except those with psychotic or related conditions'. There was no adjustment for risk. Indicator 21 is the *prevalence of hypnotic use more than two times in the last week*. It is calculated by dividing the 'number of residents who received hypnotic drugs more than twice in the past week on most recent assessment' by 'all residents on most recent assessment'. There was no adjustment for risk.

The penultimate domain in the CHSRA model is *Quality of Life*. It contains indicator numbers 22 and 23. Indicator 22 is the *prevalence of daily physical restraints*, which is calculated by dividing the 'number of residents who were physically restrained on a daily basis on the most recent assessment' by all 'residents on most recent assessment'. There was no adjustment for risk. Indicator 23 comprises the *prevalence of little or no activity*, and it is calculated by dividing the 'number of residents with little or no activity on most recent assessment' by all residents (excluding the comatose) on most recent assessment'. There was no adjustment for risk.

The final care domain (number 11) is *Skin Care* and indicator 24 comprises the *prevalence of Stage 1-4 pressure ulcers*. This is calculated by dividing 'residents with pressure ulcers (Stages 1-4) on most recent assessment' by 'all residents on most recent assessment'. There are two categories of risk (high and low) and they are described in Appendix 2.

DEVELOPMENT OF AUSTRALIAN INDICATORS

ACCREDITATION STANDARDS

As was discussed in chapters 1 and 2, the Aged Care Act was introduced in 1997 into the Federal Parliament to spearhead reform in the Australian industry. It was designed to facilitate the improvement of quality in residential services for older Australians by ensuring an increased standard of care and an enhanced quality of facilities. The Aged Care Standards and Accreditation Agency was launched in 1998 to administer the accreditation process, which is governed by a set of Principles proclaimed in October 1999. These actions have resulted in the industry being one in which self-assessment and self-improvement are fundamental. Strategies to achieve this are administered by the industry itself, and supervised by the Commonwealth. Services applying for accreditation are appraised against four standards: i) management systems; ii) staffing and organisational development; iii) [resident] health and personal care; and iv) physical environment and safe systems. All four standards and their 44 outcomes are reproduced in Appendix 1.

The Standards are important to this study for a variety of reasons. Because there is a legislative obligation to meet them by 1 January 2001, they will comprise the 'population norm' for the entire industry from that date. Further, their universal introduction has been achieved at a high cost to the industry in terms of time, money and labour. Any additional procedures required of service providers, such as the application of an Australian Quality Matrix,

which did not take these costs into account, would be likely to be met with resistance or even hostility.

The Standards examine the overall quality of care provided, and the extent to which individual residents' needs are met. They are constructed as an integrated template, and no standard can be considered in isolation from all the others. As noted in the *Standards and Guidelines Manual* (1998), the pursuit of quality will necessarily mean that each organisation conducts a self assessment of all aspects of its operations to enable it to plan and implement strategies for improvement. This cycle must be continuous and accreditation audits will look for evidence that a service has systems in place, that those systems are implemented, and that they sustain quality outcomes for residents.

RESIDENT CLASSIFICATION SCALE

It was noted earlier that indicators incorporated into the Australian Quality Matrix (AQM) were defined where possible according to RCS criteria, in addition to those of the CHSRA. Further, it will be proposed that the protocols and strategies already in use to determine a nursing home resident's classification can be put to further use in the implementation of the AQM. For these reasons a comprehensive summary of the RCS and the procedures it involves is given here. The entire arrangement is described in detail in Appendix 8.

Establishing a resident's classification

The care needs of elderly Australians residents in aged care facilities are assessed as being at one of eight levels according to a Resident Classification Scale (RCS). Ultimately they are determined by the Commonwealth Government, following an analysis of information submitted by service providers. The RCS covers 20 areas of care and the level of each is reviewed individually. A total RCS score is then calculated. (A copy of the entire scale is reproduced in Appendix 8.)

Residents with Level 1 care needs are those judged as being in greatest necessity according to their total from the 20 areas under examination. They receive the highest levels of subsidy from the Commonwealth Government to cover the cost of their care. In contrast, Level 8 residents are those with minimal care needs, and proprietors receive no financial support at all for their care from the Commonwealth.

The eligibility of any individual to receive residential care services is determined initially by the Aged Care Assessment Teams (ACATs), who make preliminary estimates about the levels of care potential residents may require. However, it is not uncommon, due to the time delays between ACAT assessment and bed availability, for seniors to ascend one or even two levels of care need during that period. Once eligibility to enter residential services is determined, the formal process by which the category to which an individual is allocated involves several stages, and commences on admission.

The first stage consists of a 'settling in' period of one week, in which a range of demographic and psychosocial data about each new resident, together with their daily activities, are recorded on admission documentation, which will vary slightly between facilities. The second stage comprises a 21 day Appraisal Period, in which a range of clinical, physical, and lifestyle data are collected and documented systematically. Reassessment of all 20 questions is conducted every year on the anniversary of a resident's admission, unlike their American counterparts who are reviewed quarterly. Temporary separations and readmissions are not subject to reappraisal, providing they do not exceed 28 days in duration. Significant changes in a resident's condition will necessitate an extended review of at least that area of the scale. The magnitude of the review will vary with the nature of the change.

Following the 21 days Appraisal Period, a care plan is drawn up for each resident, covering the areas raised in the RCS. The Commonwealth's *Documentation and Accountability Manual* (1998) insists that care plans be subject to evaluations not less frequently than every second month. Therefore, while Australian seniors resident in aged care facilities only have their status reviewed formally once a year, in fact their condition is evaluated in a comprehensive manner at least six times each year, thereby eclipsing the frequency of their American contemporaries by six to four episodes of reassessment every year.

As noted above, on each anniversary of his or her admission, the comprehensive 21 day Appraisal covering all 20 RCS items is repeated for

every resident. At this time a case conference is also held to which the resident and/or their representative is invited. All members of the care team including therapists, nursing staff, and representatives of facility management attend, sometimes also including the resident's medical adviser. The new RCS document is forwarded to the Department of Health and Aged Care for the final determination of the category of care into which the resident now falls. Subsidies for the provision of care are then directed to the proprietor on a monthly basis.

RCS weightings

The RCS inquires into 20 areas of resident need, and each response is weighted into one of four divisions, all of which are awarded a number of points. For residents to attain a Level 1 classification, they must achieve more than 81 points. At the opposite end of the Scale, residents who obtain only a Level 8 rating will have attained fewer than 10.61 points. Full details of the RCS weightings system occupy the first page of Appendix 8.

The 20 areas which are examined in the RCS are as follows: communication, mobility, meals and drinks, personal hygiene, toileting, bladder management, bowel management, understanding and undertaking living activities, problem wandering or intrusive behaviour, being verbally disruptive or noisy, physically aggressive behaviour, emotional dependence, danger to self or others, other [problematic] behaviour, social and human needs of the care recipient, social and human needs of families and friends, medication, technical and complex nursing procedures; therapy and other services.

There are four levels in the RCS weighting categories: A – *No difficulty*; B – *some difficulty*; C – *Major difficulty*, and D – *Extensive difficulty*. They are defined in terms of the area being investigated. For example, as noted above, the first area to be questioned is that of ‘communication’. This question refers to the degree of assistance the resident needs in communicating, for whatever reason, with staff, relatives and friends, and other residents. It measures the additional effort taken by staff to facilitate effective communication, where care recipients have:

- hearing loss not remedied by aids (or where there is resistance to the use of an aid);
- visual impairment not remedied by spectacles or contact lenses;
- speech impediments;
- language difficulties;
- comprehension problems that contribute to communication difficulties.

It also takes into account the effort involved in cleaning and fitting hearing aids, spectacles and lenses.

If the resident has no difficulty with communication as described above, an ‘A’ is recorded and the definition *requires no assistance* will apply. When the resident requires assistance with the cleaning and fitting of aids, a ‘B’ is recorded. A ‘C’ rating will apply when facility staff are required to spend additional time listening, speaking slowly and clearly, and encouraging a resident to use non-verbal clues or communicate in other ways. The ‘D’ (extensive difficulty) rating will apply where a resident requires assistance with

communication from facility staff on almost all occasions, by translating or interpreting, or non-verbal communication, for example by signing or using communication aids including talking boards or computers. The weightings for these responses are A = 0.00, B = 0.28, C = 0.36, and D = 0.83 points respectively.

During assessment, each of the 20 areas being investigated will be reviewed utilising the same processes, although the definitions and values of the response rating vary between areas. For example, the fourth area to be investigated is that of 'personal hygiene'. An 'A' weighting will be almost identical to that of 'Communication', i.e. that the resident will attend to all their personal hygiene independently, and the points awarded will be 0.00. A resident who scores a 'B' grade will require some assistance with some activities such as showering or dressing or grooming, and will receive 5.34 points. To be eligible to receive a 'C' grade a resident will need the assistance of 1 staff member for all activities, and will be awarded 14.07 points. Finally, a resident who receives a 'D' grading will require staff to encourage or persuade them on a one-to-one basis, to 'optimise their self care functions', or who will require two staff members to carry out most activities. This grade receives 14.61 points.

INTEGRATION OF STUDY INDICATORS, THE RCS AND CHSRA INDICATORS

Indicators identified by study informants

It was noted in the accounts of Phases 1 and 2 of the *Quality of Care for Nursing Home Residents* project (chapters 4 and 5 respectively) that

informants identified six areas of clinical care as being pre-eminent in distinguishing an optimal from a standard residential aged care service in Australia. These were: rates of decubitus ulcers, rates of incontinence, hydration management, rates of infections from all sources, skin integrity and poly pharmacy. Other issues raised by Australian informants and reported in chapters 4 and 5 include resident mobility, food concerns, mouth and sensory care, restraint rates and resident transfers. With regard to psychosocial matters: contact with the outside world, family integration into the resident's life in the home, activities programs, complaint mechanisms, spiritual well-being, and the difficulties associated with a confined life style, all featured in Australian responses. The development of the Australian Quality Matrix necessitated consideration of each of these.

Chapter 1 indicated that one of the guiding principles in the development of the AQM was that its execution contributed only minimal additional weight to the already heavy workload of the care provider. Therefore, this required that the AQM be constructed around existing practice wherever possible and, as highlighted above, the one chosen was that of the RCS. The information is already collected for other purposes. Further, it also reflects widespread practice in other parts of the world, as Chapter 2 demonstrated.

The issues raised for consideration by Australian informants included the 18 items listed above. The reader will recall from Chapter 4 that this list emerged following a series of interviews with 121 individuals including residents and their families, and the managers and staff in nine case study homes across the

country. They represented the six most frequently mentioned issues in three categories of care: clinical, the activities of daily living, and psychosocial care, in rank order. The findings were confirmed in a nation wide study of 208 facilities, and reported in Chapter 5.

Because the AQM aspired to utilise the indicators identified by study informants, while at the same time addressing the care areas of the RCS, a fundamental feature of the developmental period was to align each with the other. Tables 6.1, 6.2 and 6.3 pair the study indicators with their relevant RCS questions. This analysis is not intended to be exhaustive. Many of the RCS items apply to more than one of the 18 AQM indicators. The purpose of this account is simply to identify the indicators in both scales that most closely approximate each other.

Table 6.1 Project clinical indicators and the Resident Classification Scale

INDICATOR	RCS ITEMS
Pressure ulcer rates	Pressure ulcer care is not mentioned specifically in the RCS. It is covered under item 5, the maintenance of skin integrity
Continence rates	Q.5 Toileting Q.6 Bladder management Q.7 Bowel management
Hydration management	Q.3 Meals and drinks
Infection rates	Q.18 Specialised Nursing, List 2 Risk management procedures relating to acute or chronic infectious conditions
Skin integrity	Q.4 Personal hygiene Q.5 Skin integrity Q.18 Specialised nursing List 1 Simple wound dressings and List 2 Complex wound dressings
Poly pharmacy	Q.17 Medication Q.18 Specialised nursing, List 1 Pain management, palliative care

Table 6.2 Project activities of daily living indicators and the Resident Classification Scale

INDICATOR	RCS ITEMS
Mobility rates	Q.2 Mobility
Food issues	Q.3 Meals and drinks
Mouth care	Q.4 Physical care – teeth cleaning Q.18 Specialised Nursing List 1, oral hygiene
Other senses	Q.17 Medications, ear/eye drops Q.18 Specialised Nursing List 1 eye care
Restraints	Q.13 Danger to self or others Q.14 Other behaviour
Resident transfers	Q.2 Mobility

Table 6.3 Project social indicators and the Resident Classification Scale

INDICATOR	RCS ITEM
Contact with the outside world	Q.15 Social and Human needs – resident Q.19 Therapy Q.20 Other services
Family involvement	Q.16 Social and Human needs – others
Activities	Q.8 Understanding and undertaking living activities Q.9 Wandering or intrusive behaviours Q.10 Verbally disruptive Q.11 Physically aggressive Q.19 Therapy
Complaints	Q.1 Communication Q.9 Wandering or intrusive behaviours Q.10 Verbally disruptive Q.11 Physically aggressive Q.15 & 16 Social and Human needs
Spiritual well-being	Q.15 & 16 Social and Human needs
Confined life style	Q.12 Emotional dependence Q.15 & 16 Social and Human needs

Alignment of study indicators with CHSRA indicators

Due to the importance of the CHSRA findings in the development of the Australian Quality Matrix, Table 6.4 was constructed to associate the 18 Australian indicators, where possible, with the 11 care domains and 24 indicators of the CHSRA.

Table 6.4 Alignment with project indicators and CHSRA indicators

INDICATOR	CHSRA DOMAIN NO & NAME AND INDICATOR NO & NAME
Pressure ulcer rates	D11, Skin care, I 24, Prevalence of Stage 1- 4 pressure ulcers
Continence rates	D5, Elimination/incontinence, I 8, Prevalence of bladder or bowel incontinence, I 9, Prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan
Hydration management	D7, Nutrition/Eating, I 15 Prevalence of dehydration
Infection rates	D6, Infection control, I 12 Prevalence of UTIs
Skin integrity	There is no corresponding CHSRA indicator
Poly pharmacy	D3, clinical management, I 6 Use of 9 or more medications D9, Psychotropic drug use, I 19-21 anti psychotic drug use, anti anxiety / hypnotic drug use
Mobility rates	D8, Physical functioning, I 16 Prevalence of bed fast residents I 17, Incidence of decline in late loss ADLs, I 18, incidence of decline in ROM
Food issues	D7, Nutrition/Feeding, I 13 Prevalence of weight loss I 14 Prevalence of tube feeds
Mouth care	There is no corresponding CHSRA indicator
Other senses	There is no corresponding CHSRA indicator
Restraints	D10, Quality of life, I 22, Prevalence of daily restraints
Resident transfers	D1, Accidents, I 1, Incidence of new fractures I 2 Prevalence of falls
Contact with the outside world	D10, Quality of life, I 23, Prevalence of little or no activity
Family involvement	D2, Behavioural/Emotional patterns, I 3, Prevalence of behavioural symptoms affecting others D4, Cognitive patterns, I 7, Incidence of cognitive impairment
Activities	D10, Quality of life I 23, Prevalence of little or no activity
Complaints	There is no corresponding CHSRA indicator
Spiritual well-being	D2, Behavioural/emotional patterns, I 3 Symptoms affecting others
Confined life style difficulties	D2, Behavioural/emotional patterns, I 3 Symptoms affecting others D4, Cognitive patterns, I 7, Incidence of cognitive impairment D10, Quality of life I 23, Prevalence of little or no activity

DEVELOPMENT OF THE AUSTRALIAN QUALITY MATRIX

INTRODUCTION

As noted earlier, while the *Quality of Care for Nursing Home Residents'* project acknowledged that there is a variety of ways in which indicators of quality clinical care can be determined, this study adopted a quantitative

approach. Its principal inclusion criterion was that any indicator proposed for incorporation in an Australian model must be measurable. One international model proved highly influential, that developed by the Center of Health Systems Research and Analysis at the University of Wisconsin. Furthermore, each of the studies on indicators of quality clinical care, reviewed in Chapter 2, has adopted an approach similar in one or a number of respects to that of the CHSRA model. Each has recognised that there are distinct domains or dimensions of care provided in residential services for the aged. Further, many have described a series of indicators, signs or criteria of care within the specialised domains.

In keeping with the original plan to avoid creating further work for current care givers, but taking advantage of their existing expertise, this project proposed that the Australian Quality Matrix (AQM) encompass care domains adapted from the aged care accreditation standards. Four dimensions of care were identified. First was resident health, followed by resident personal care. Resident life style represented the third care domain, and the care environment completed the group. Next, the 18 original indicators of quality care, nominated by study informants during Phases 1 and 2, were described according to the RCS questions to which they applied. Subsequently, utilising measurement criteria developed by CHSRA in the absence of an established Australian model, they were allocated into the care domains and distributed into a draft Australian Quality Matrix. This resulted in three indicators being located in the resident health domain, six in the personal care domain, five in

the resident life style domain and four in the care environment domain. Table 6.5 summarises this distribution.

Table 6.5 Australian Quality Matrix summary

CARE DOMAINS	INDICATOR NUMBERS	INDICATOR DESCRIPTORS
Resident Health	1 2 3	Pressure ulcer rates Rates of infection from all sources Poly pharmacy
Personal Care	4 5 6 7 8 9	Continence rates Hydration management Skin integrity Mobility Oral hygiene Sensory care
Resident life style	10 11 12 13 14	Nutrition Activities Complaints resolution Spiritual well-being Confined life style difficulties
Care environment	15 16 17 18	Restraints Transfers Contact with the outside world Family involvement

AUSTRALIAN CARE DOMAIN 1 – RESIDENT HEALTH

Three indicators from the study’s original 18 are most closely aligned with the Australian care domain 1 *Resident’s Health*: pressure ulcer rates, rates of infection from all sources and poly pharmacy. Table 6.6 highlights the distribution.

Table 6.6 Australian care domain 1 – Resident health

NO	INDICATOR	MEASUREMENT CRITERIA	RISK
1	Prevalence of Stage 1-4 pressure ulcers	Numerator: Residents with pressure ulcers Stages 1-4 on most recent assessment Denominator: All residents on most recent assessment	High: Impaired transfer or mobility, OR Comatose, OR Malnourished OR End stage disease on most recent assessment Low: All others on most recent assessment
2	Infections	Numerator: Number of residents with infections from all sources on most recent assessment Denominator: All residents on most recent assessment	None
3	Poly pharmacy	Numerator: Residents who receive 9 or more different medications on most recent assessment Denominator: All residents on most recent assessment	None

Australian indicator 1 – Pressure ulcer rates

As Table 6.1 revealed there is no item on the RCS that corresponds precisely with pressure ulcer rates, although it is covered in general terms under RCS questions 4 (personal hygiene) and 18 (specialised nursing). However, it was the pre-eminent indicator nominated by all registered nurse informants who work at the bedside in the case studies, as Chapter 4 indicated. Further, it was an indicator recognised as being important in all the studies on the topic cited in Chapter 2. In the absence of a pre-existing Australian definition, the *Quality of Care for Nursing Home Residents* project elected to adopt the CHSRA definition: prevalence of Stage 1-4 pressure ulcers.

Australian indicator 2 – Infections

Study indicator number 2, infections from all sources, is most closely aligned with RCS question 18, Specialised Nursing. List 2 describes risk management procedures relating to acute or chronic infectious conditions. CHSRA domain 6 confines infection control to the prevalence of urinary tract infections (indicator 12). However, in the context of the present study, both urinary tract infections (UTIs) and respiratory tract infections (RTIs) were mentioned, and hence each should be considered for inclusion in an Australian Quality Matrix. The CHSRA definition is equally effective for both sources of infection and therefore has applicability to both in this context. As Appendix 2 indicates, CHSRA defines infection control as ‘the number of residents with urinary tract infections on most recent assessment divided by all residents on most recent assessment’. There is no adjustment for risk. The definition would be equally valid for respiratory tract infections and therefore has application here. On balance, it was decided to utilise the RCS definition of ‘infections from all sources’. It recognises the two nominated by many Australian informants (see Chapter 4), but also makes allowance for others mentioned by fewer informants such as conjunctivitis or other eye problems and similar conditions. As Table 6.6 indicates, it is constructed according to the criteria suggested by CHSRA and, as will be indicated in Chapter 7, the definition was used with effect during the trial and evaluation of the AQM.

Australian indicator 3 – Poly pharmacy

Poly pharmacy is the final indicator in this care domain. It is associated with RCS questions 17 on Medications and 18 on Specialised Nursing, List 1, pain

management and palliative care. Question 17 refers to medications administered on a regular basis and question 18 nominates the implementation of a pain management or palliative care program, requiring more than regular or PRN (as required) analgesia. Neither question nominates the number of drugs which would represent a poly pharmaceutical regimen in the Australian context, nor are specific classes of medications mentioned other than in the most general sense, for example, aperients, eye drops, etc. Classes of medication such as psychotropic or anti anxiety drugs are not nominated. In the absence of an Australian standard, and due to its widespread application in the United States, the CHSRA criteria, set out in indicator 6, *the use of 9 or more different medications* would seem to be as useful as any. Therefore Australian indicator 3 was described as ‘residents who received nine or more different medications each day on most recent assessment’, divided by ‘all residents on most recent assessment’, with no adjustment for risk.

AUSTRALIAN CARE DOMAIN 2 – PERSONAL CARE

The second Australian care domain is that of *Personal Care*. It contains six of the 18 indicators originally identified by study informants: incontinence rates, hydration management, skin integrity, mobility, oral hygiene, and sensory care. Table 6.7 describes Australian Care Domain 2 and its six indicators.

Table 6.7 Australian care domain 2 - Personal care

NO	INDICATOR	MEASUREMENT CRITERIA	RISK
4	Incontinence	Numerator: Number of residents who were frequently or continuously incontinent on most recent assessment Denominator: All residents on most recent assessment excluding the comatose, those with indwelling catheters or an ostomy on most recent assessment	High: cognitively impaired, mobility dependent Low: All others on most recent assessment
5	Hydration management	Numerator: Number of dehydrated residents on most recent assessment Denominator: All residents on most recent assessment	High: Geographic location Low: All others
6	Skin integrity (Prevalence of skin tears)	Numerator: Number of residents with skin tears on most recent assessment Denominator: All residents on most recent assessment	None
7	Mobility	Numerator: Number of residents requiring some or more assistance with mobility on most recent assessment Denominator: All residents on most recent assessment, excluding those who were mobility dependent on previous assessment	None
8	Oral hygiene	Numerator: Number of residents who required dental/oral treatment between previous and most recent assessment Denominator: Total number of residents	None
9	Care of the senses	Numerator: Number of residents exhibiting symptoms of visual or auditory deterioration between previous and most recent assessment Denominator: Total number of residents excluding those with maximal loss at previous assessment	None

Australian indicator 4 – Incontinence

The management of incontinent residents is an issue of paramount concern to aged care providers all over the world, as revealed in Chapter 2. Among RCS areas of investigation, question 5 about toileting, and questions 6 and 7 about bladder and bowel management, respectively, have relevance to this indicator. In addition question 18 (specialised nursing) addresses the insertion and care of urinary catheters and the administration of suppositories, enemas and the like. Toileting is important in the management of the incontinent because prompting techniques and assistance with clothing and mobility may mean the difference between a resident who remains dry and one who soils him or herself. Bladder and bowel management address the regularity of episodes of incontinence, the use of continence aids, and the strategic planning for those whose condition cannot be improved by a continence training program.

The CHSRA domain *Elimination/Incontinence* is exactly comparable with the AQM and RCS descriptors and hence provides an ideal means of defining this indicator. However, it utilises three indicators (8, 9, and 10) to cover the same items of care. CHSRA indicator 8, the *prevalence of bladder or bowel incontinence* is defined as the ‘number of residents who were frequently incontinent or incontinent on most recent assessment’ divided by ‘all residents except noted in exclusion’. Those who were excluded consisted of the comatose, and residents who have indwelling catheters or an ostomy at most recent assessment. Risk adjustment is divided into two groups: (i) those at high risk include residents with severe cognitive impairment, or those who are

totally ADL dependent in mobility, at most recent assessment; and (ii) those at low risk include all the others at most recent assessment.

The title of CHSRA indicator 9 is the *prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan*. This is determined by dividing the ‘numbers of residents without a toileting plan on most recent assessment’ by ‘residents with frequent incontinence or occasional incontinence in either bladder or bowel on most recent assessment’. There is no adjustment for risk.

CHSRA Indicator 10 is the *prevalence of indwelling catheters (IDCs)* and consists of the ‘number of residents with IDCs on most recent assessment’ divided by ‘all residents on most recent assessment’. Indicator 10 is another one that requires no adjustment for risk.

The AQM recognised all of these features when it defined incontinence as being ‘the number of residents who were frequently or continuously incontinent on most recent assessment’, divided by ‘all residents on most recent assessment, except those excluded’. It identifies two categories of risk and they and the exclusion criteria are detailed in Table 6.7. A distinction was not made between urinary and faecal incontinence because study informants in Phases 1 and 2 of the project made no such distinction. Further, while urinary incontinence is a wide spread phenomenon (at least to some degree) faecal incontinence is less common according to Phase 1 informants. It was noted earlier that 42 of the Phase 3 home’s 60 residents required some assistance

with urinary incontinence. However, only 10 had any faecal incontinent episodes on a weekly or more frequent basis, and each resident in this group was doubly incontinent. This indicator could be adapted into 4a – urinary incontinence, and 4b – faecal incontinence, if a more precise definition was required. The exclusion criteria would also need to be refined according to the type of incontinence being assessed.

Australian indicator 5 – Hydration management

The reader will recall from Chapter 4 that this indicator was placed first by the 10 case study managerial registered nurses when ranking clinical indicators of importance. (Bedside RNs ranked pressure ulcer rates as the most important.) The RCS area most closely aligned with hydration management is question 3 ‘meals and drinks’, which refers to the degree of assistance the care recipient requires with eating and drinking. Again as Chapter 4 demonstrated, other RCS items are also indirectly related to hydration management. For example, levels of hydration hold implications for question 5, ‘skin integrity’, which is compromised more readily among residents who are not adequately hydrated. In addition, List 1 of question 18, ‘specialised nursing’, mentions tube feeding, and List 2 considers the special needs of those with dysphagia (difficulty with swallowing).

One area in which the direct association between the Australian and the CHSRA indicators ceases is that regarding risk adjustment for hydration management. Australian residents with individual problems, such as cognitive impairment in which they forget how to drink, or biological dysfunction in

which their sense of thirst is diminished, are covered by RCS question 3. Their hydration management becomes the responsibility of their professional care givers if they are unable to attend to it themselves. However, another factor comes into play in the Australian situation, and that is geographic location. Those who reside in low latitudes are exposed to longer periods of hot weather due to their proximity to the equator. In addition, those who reside in inland locations are frequently exposed to prolonged periods of dry weather due to the continental climatic patterns that prevail over much of central Australia. Therefore, the AQM proposes that a category of high risk be established in relation to this indicator, and that it comprises those who are located north of 23.5° south (the Tropic of Capricorn) and between 120° E and 145° E of longitude. This encompasses an area from about Port Headland in Western Australia to west of the Great Dividing Range in Queensland. Those outside these parameters can be considered at low or lesser risk. For those in high risk locations, formal hydration programs may be one solution to modify the impact of this risk.

Australian indicator 6 – Skin integrity

RCS questions 4 ‘personal hygiene’, and 18 ‘specialised nursing’, cover the indicator skin integrity. Question 4 refers to the degree of assistance that the care recipient requires with showering and washing, dressing and undressing, grooming and the routine application of moisturisers for dry skin. The first item of List 1 in question 18 states ‘maintenance of skin integrity including changing of the position of a chair fast or bed fast resident’. This list also encompasses simple wound dressings, while List 2 addresses complex wound

management. There is no exact CHSRA indicator which reflects the Australian situation, although domain 11 addresses skin care, but it confines itself to one indicator, number 24, which considers the prevalence of Stage 1-4 pressure ulcers and is more closely aligned to AQM indicator 1.

The AQM proposes that this indicator be defined as the ‘prevalence of skin tears’ comprising the ‘number of residents with skin tears at last assessment’ divided by ‘all residents at last assessment’. It is important to confine the numerator to the number of residents with skin tears rather than the number of individual tears, to avoid the implications associated with individual residents with particularly fragile skin who are prone to developing skin tears during the course of their activities of daily living. For those homes with residents in this position, the AQM could be modified and an ancillary indicator developed to address this if the facility wished to monitor its internal continuous quality improvement processes.

Australian indicator 7 – Mobility

Issues of mobility are covered by RCS question 2, also called ‘mobility’. It refers to the degree of assistance required by a resident that includes: assistance with walking on a one-to-one basis, and the provision of supervision, encouragement and physical support. It also includes assistance in the use of mobility aids, such as wheelchairs and walking frames, and assistance with moving to and from chairs, wheelchairs, and beds or toilets. Resident transfers and the use of mechanical lifters also have a place in this indicator. The AQM indicator comprises the ‘number of residents requiring some or more assistance

with mobility on most recent assessment’, divided by ‘all residents on most recent assessment, excluding those who were mobility dependent on the previous assessment’.

The closest parallel that can be drawn between the Australian indicator and that developed by CHSRA is found in CHSRA domain 8, ‘physical functioning’. This domain contains three indicators, numbers 16, 17, and 18, and they consist of the prevalence of bed fast residents, the incidence of decline in late loss ADLs, and the incidence of decline in range of movement (ROM) respectively. These indicators were described comprehensively earlier in the chapter and will not be repeated here.

In a generic sense CHSRA indicators 16 and 17 were incorporated into Australian indicator 7, with nursing care staff addressing RCS question 2 on mobility, although the number of bed fast residents was not an issue that was raised by study informants. However, in the Australian setting, the range of movement (ROM) assessments identified in CHSRA indicator 18, are completed by physiotherapists rather than nursing care staff, and as such fall within RCS question 19 under the heading ‘therapy’.

Australian indicator 8 – Oral hygiene

Oral hygiene is addressed by two RCS questions. Teeth cleaning falls within the area of question 4, ‘physical care’, while List 1 in question 18 ‘specialised nursing’ focuses on oral hygiene itself, and includes mouth toilets for those unable to care for their teeth or with gum disease and other malfunctions of the

mouth. There is no CHSRA indicator that corresponds closely with this issue. The Australian indicator can be defined very simply as the prevalence of symptoms of dental or oral deterioration, and calculated by dividing the number of residents who required any kind of dental or oral treatment between the previous and the most recent assessment by the total number of residents. Adjustment for risk is not necessary.

Australian indicator 9 - Care of the senses

RCS questions 17 (medications) and 18 (specialised nursing) cover care of the senses. The administration of medications makes reference to prescribed eye and eardrops, nebulisers, metered aerosols and topically applied prescribed medications, among other items, all with particular applications to one or other of the five senses. List 1 of question 18 includes eye care and the care and fitting of prostheses.

In common with dental care, care of the senses was nominated by study informants as indicative of good quality care and its neglect as characterising poor quality care. So, for example, if a resident has ceased to read because his or her glasses are no longer adequate to the task, the facility in which he or she resides may be seen to be neglecting their duty of care to their resident if the matter is unattended

It is interesting to note that this is another indicator without a comparable CHSRA directive. Because of its generalised nature it also represents an indicator that is difficult to define or calculate. Deterioration in the sense of

smell is particularly difficult to discern among those with cognitive impairment, and touch and taste may be better included in the care plan, while addressing skin integrity in RCS questions 4 and 18, and meals and drinks in RCS question 3. For these reasons the AQM confined its consideration of the issue of sensory care to matters pertaining to vision and hearing. As with dental care, the indicator can be defined very simply as the prevalence of symptoms of visual or auditory deterioration, and it can be calculated by dividing the number of residents exhibiting such symptoms between the previous and most recent assessments by the total number of residents, excluding those with maximal loss at previous assessment.

AUSTRALIAN CARE DOMAIN 3 – RESIDENT LIFESTYLE

The third Australian Care Domain *Resident Lifestyle* contains five indicators: nutrition, activities, complaints resolution, spiritual well-being, and confined life style difficulties. Table 6.8 demonstrates its content.

Australian indicator 10 – Nutrition

All matters pertaining to meals and drink are covered under the RCS question number 3, which refers to the degree of assistance that the care recipient requires with eating, and drinking. Parenteral feeding is exempted from this discussion because it is dealt with in question 18, 'specialised nursing'. During the case study interviews and national survey results which generated this indicator, reference was never made to peg or naso-gastric feeding and therefore it is omitted from this indicator.

Table 6.8 Australian care domain 3 - Resident life style

NO	INDICATORS	MEASUREMENT CRITERIA	RISK
10	Nutrition	Numerator: Proportion of residents with weight loss of 5% or more in 30 days or 10% or more in the past 6 months Denominator: All residents on most recent assessment	None
11	Activities	Numerator: Proportion of residents who participate in fewer than two activities per week on most recent assessment Denominator: All residents on most recent assessment excluding those who did not participate on previous assessment	None
12	Complaints resolution	Numerator: Number of formal complaints received between previous assessment and most recent assessment. Denominator: All residents on most recent assessment	None
13	Spiritual well-being*	Numerator: Number of pastoral visits and services of worship between previous and current assessment Denominator: All residents on most recent assessment	None
14	Confined life style	Numerator: Residents with behavioural symptoms affecting others on most recent assessment. Denominator: All residents on most recent assessment	High: residents who are cognitively or mobility impaired Low: all others

* The difficulties associated with describing spiritual well-being are canvassed later in this chapter, and in Chapter 7 on the trial and evaluation of the AQM.

The CHSRA indicator equivalent to RCS item 3 is domain 7 'nutrition/eating' and there are three indicators within this domain, numbers 13, 14 and 15. The only one of direct relation to the Australian indicator is number 13, 'prevalence of weight loss'. Number 14 'prevalence of tube feeding' is more sensibly addressed in RCS 18, and indicator 15 the 'prevalence of dehydration' was considered in Australian indicator 5, although it is based on RCS question 3 as well. CHSRA indicator 13 is described as 'the proportion of residents with weight loss of 5% or more in the last 30 days or 10% or more in the last 6 months on most recent assessment' divided by 'all residents on most recent assessment'. As it is the general principle for most nursing homes in Australia to weigh their residents once a month, it will be very easy for care staff to comply with this definition, and it is therefore included without modification in the AQM.

Australian indicator 11 – Activities

RCS question 8 'understanding and undertaking living activities' addresses this area specifically. Other RCS areas which also hold implications for the pursuit of activities programs include question 9 'wandering behaviour', question 10 'verbal disruption', question 11 'physical aggression' and question 19 'therapy'. In particular, diversional therapy plays a major role in resident activities programs because it encompasses games, entertainment such as concerts, and alternative therapies such as massage. Other therapists also feature in the area of activities. Physiotherapy, for example, is usually offered to residents in need of it or who desire to have it, at least during weekdays. Other therapies mentioned in question 19 include occupational therapy (OT)

and speech therapy. OT is not widespread among the majority of Australian nursing homes although larger facilities may have rehabilitation programs, and speech therapy is usually practised as a professional consultation, rather than a service readily available to all. Finally, music therapy and aromatherapy are not claimable under question 19; however, in some instances question 20, 'other services', may be invoked.

CHSRA indicator 23, 'the prevalence of little or no activity', in domain 10, 'quality of life', is the indicator which most closely resembles the Australian situation. A degree of caution should be exercised in this regard. CHSRA defines this indicator as the number of residents with little or no activity on most recent assessment, divided by all residents on most recent assessment excluding those who are comatose.

However, in the Australia context, a proportion of residents decline to participate in any activities programs because they prefer a more solitary existence. This does not reflect a diminished quality of life, rather, being forced into playing games or attending concerts when an individual is disinclined to do so, in some instances represents a major challenge to a comfortable life. (Care staff should invite reclusive residents on each occasion an activity is offered to encourage social interaction, but should willingly accept a rebuttal any time it is given.) As a consequence of all of the above factors, the RCS definition, 'the proportion of residents who participate in fewer than two activities per week' was the one utilised in AQM indicator 11.

Australian indicator 12 – Complaints resolution

A variety of RCS questions cover this indicator: question 1, ‘communications’, and questions 15 and 16, ‘social and human needs’, being the most important. In addition, a variety of other RCS topics play a peripheral role. Residents with wandering and intrusive behaviour (question 9) and those who are verbally or physically disruptive (questions 10 and 11) are frequently the subject of complaints. Formal mechanisms exist at both industry and government levels to resolve complaints, and Outcome 1.4 of Standard 1 address this matter specifically.

There is no CHSRA indicator that closely approximates this issue in Australia. However, the development of a definition is straightforward and is as follows. ‘The number of formal complaints (verbal and written) received between the previous assessment and the most recent assessment divided by the number of residents on most recent assessment’. By confining this measurement to formal complaints, vexatious accusations are minimised, and even if the initial approach is verbal, facilities are obliged to document the matter, so there is always at least some evidence as to nature of the complainant’s distress.

Australian indicator 13 – Spiritual well-being

RCS items 15 and 16 cover this question when they consider the social and human needs of both the resident and their family and friends. The CHSRA domain, which most closely approximates this Australian issue, is that of behavioral/emotional patterns but its association is only marginal. It is an extremely difficult idea to define or measure (which may be why the CHSRA

scholars do not address it). However, not only did it feature in Phases 1 and 2 of the *Quality of Care for Nursing Home Residents* project, it is also incorporated into Aged Care Standard 3, outcome 3.8. The Standard highlights eight areas for consideration, of which four are directly related to this issue. They include: the availability of areas for the observation of a variety of cultural, spiritual or religious ceremonies, entry assessment of cultural, spiritual and linguistic issues and consultation with each resident (or his or her representative), the observation of religious, cultural and personal significant events of choice, and that residents are enabled to maintain their dietary customs according to their religious and cultural beliefs. While acknowledging the limitations associated with this definition, which are described in Chapter 7, the AQM adopted the following descriptors for measuring spiritual well-being. For the purposes of the matrix, it is defined as ‘the number of pastoral visits and services of worship in which residents participated between the previous and the most recent assessment’, divided by ‘all residents on most recent assessment’.

Australian indicator 14 – Confined lifestyle difficulties

The final indicator in Australian care domain number three is 'confined life style difficulties'. RCS questions 12, 'emotional dependence' and 15 and 16, 'social and human needs', apply to this indicator as do CHSRA indicators 3 in domain 2 (behavioral and emotional patterns), and 23 in domain 10 (quality of life). These comprise 'symptoms affecting others' and 'prevalence of little or no activity' respectively.

A variety of other RCS items hold peripheral significance. Behavioural symptoms affecting others identified in the Australian context, and described in the RCS, include 'problem wandering or intrusive behaviour' (question 10); and 'physically aggressive behaviour' (question 11). These may compound the difficulties of a confined lifestyle if a cognitively intact resident cannot avoid being exposed to a cognitively impaired one.

It was noted earlier that RCS question 19, 'therapies', looks at all therapeutic services provided to residents, including those of the diversional therapist, who is responsible for all social activities and entertainments arranged for residents. As the role of activities has been addressed in an indicator of its own (number 11), the matter has no further place in this indicator, other than to note its potential influence.

The other CHSRA indicator of relevance to this discussion, number 3, the *prevalence of behavioral symptoms affecting others* is defined as 'residents with behavioral symptoms affecting others on most recent assessment' divided by 'all residents on most recent assessment'. It distinguishes between high and low risk residents. High-risk individuals are defined as those in whom the presence of cognitive impairment is apparent on most recent assessment, or those with a range of ICD 9 defined psychotic disorders on most recent assessment, and detailed in Appendix 2. Low risk residents comprise all others on most recent assessment. The Australian Quality Matrix adopted this CHSRA definition for its own use.

AUSTRALIAN CARE DOMAIN 4 – THE CARE ENVIRONMENT

Within this domain there are four indicators of quality care: the use of restraints (number 15), resident transfers (number 16), contact with the outside world (number 17) and family involvement in resident care (number 18). Table 6.9 summarises this distribution.

Table 6.9 Australian care domain 4 - Care environment

NO	INDICATOR	MEASUREMENT CRITERIA	RISK
15	Restraints	Numerator: Number of residents who are restrained on a daily basis on most recent assessment Denominator: All residents on most recent assessment	None
16	Transfers	Numerator: Number of residents who had falls on most recent assessment Denominator: All residents on most recent assessment	None
17	Resident contact with the outside world	Numerator: Number of residents with symptoms of depression on most recent assessment Denominator: All residents on most recent assessment excluding those diagnosed with symptoms of depression on previous assessment	None
18	Family involvement	Numerator: New claims for family support on most recent assessment Denominator: All residents on most recent assessment excluding those claimed for on previous assessment	None

Australian indicator 15 – Use of restraints

Two RCS questions apply in this context: number 13, ‘danger to self or others’ and number 14 ‘other behaviour’. Question 13 considers high-risk behaviour, which includes behaviour requiring supervision or intervention and strategies to minimise the danger. Risk of falling is the principal reason why an individual resident might be restrained, and any resident who is restrained

should be subjected to a falls risk assessment before any of the legal obligations, such as obtaining consent to restrain authorisation, are commenced. CHSRA care domain 10 *Quality of life* covers this same area, and indicator 22, the ‘prevalence of daily physical restraints’ is calculated as the number of residents who were physically restrained daily on most recent assessment divided by all residents on most recent assessment. It has equal applicability in the Australian setting.

Australian indicator 16 – Resident transfers

Question 2 of the RCS, ‘mobility’, applies to this indicator. This incorporates a wide range of options including assistance with walking, relocation between beds and chairs, transfers between locations, and the use of aids or prostheses. Staff involvement may be limited to the simple supervision of an action, through to the engagement of two staff members and the use of mechanical aids such as hydraulic lifters. It holds implications for several other RCS areas, including skin integrity (questions 4 and 18), continence (questions 5, 6, and 7) and danger to self or others (question 13).

In CHSRA terms, resident mobility is covered in domain 1 ‘accidents’ indicators 1 and 2, the incidence of new fractures and the prevalence of falls respectively. Both indicators could be assessed in Australian terms, because every incident that results in either a fall or a fracture is obliged to be reported and recorded on an incident form. Further, some falls result in fractures, but few fractures are ever the result of anything but a fall, hence the potential to count such episodes twice is high.

A multitude of resident transfers are conducted every shift of every day in Australian nursing homes, the vast majority without incident. In addition, when staff members are present the opportunity for falls and fractures to occur is (hopefully) minimised, to say nothing of limiting compromises to skin integrity and similar outcomes. However, to take into account those resident initiated movements which do result in harm to themselves or others, the AQM has utilised one of the CHSRA descriptions to define this indicator. The measure of quality in resident transfers (indicator 16) was defined as the 'number of residents who had falls on most recent assessment' divided by 'all residents on most recent assessment'. As with indicator 6, 'skin integrity', by confining itself to the number of residents who fall in a given assessment period rather than the number of falls, this avoids confounders such as residents with postural hypotension and similar conditions who are prone to multiple falls in any given period.

Australian indicator 17 – Contact with the outside world

RCS Items 12, 15, 19 and 20 cover this indicator. Question 12 reflects on residents' emotional dependence, question 15 addresses the social and human needs of the resident, question 19 considers therapy and question 20 applies to other services. It involves all those people who live outside the nursing home and with whom the resident comes into contact, from staff to family and friends, to external service providers such as hairdressers, to volunteers who work in the home, and the manner in which the resident interacts with them. There is no exact CHSRA equivalent although domain 10, *Quality of life*,

indicator 23 the 'prevalence of little or no activity', approximates it. Alternatively domain 2 indicator 4, the 'prevalence of symptoms of depression' also has an application.

Resident progress notes record all visits to them from such sources of company and advice and would make it possible to measure an incidence rate of activities of this type, comparing new visits at most recent assessment with past assessment periods. Resident interaction with these individuals is not always recorded, although the interventions to manage resident behaviours, and their responses to them, are noted. Hence, it is possible to adapt the CHSRA criteria to this indicator as well.

The prevalence of symptoms of depression is calculated as the 'number of residents with symptoms of depression on most recent assessment' divided by 'all residents on most recent assessment'. CHSRA describes symptoms of depression as 'being in a sad mood' and at least two of the following symptoms: distress (resident makes negative statements), agitation or withdrawal, not awake most of the day or waking with unpleasant mood, and/or suicidal or experiencing recurrent thoughts of death. There is no adjustment for risk. The AQM adopted this definition for use in its indicator 17.

Australian indicator 18 – Family involvement in resident's life

The Resident Classification Scale places such emphasis on the involvement of a resident's family and friends in their lives that it has allocated a place

specifically for it in the Scale, item 16. It relates to activities involving one or more members of staff interacting with families, friends or the community. The activity may or may not involve the resident and includes such matters as giving guidance, emotional support, care planning, legal or guardianship issues, and cultural and spiritual matters. Support to family members is defined in terms of 'some' support comprising encounters that are less than weekly in frequency, 'major' support means at least weekly but not daily, and 'extensive' support means support on a daily basis.

CHSRA indicators make no reference to family members, although the MDS reviews family matters in a comprehensive manner. The closest area with implications for family involvement is drawn from domain 2, behavior/emotional patterns, indicator 3, 'prevalence of behavioral symptoms affecting others'.

The AQM drew on the RCS for its definition of this indicator: the incidence of new claims for family support at most recent assessment divided by the number of residents on whose behalf a claim for family support was not made on previous assessment. Those claiming an A rating 'requiring no specific support' were excluded in each case. (The reader will recall from Appendix 8 that there are four categories of ratings in the Resident Classification Scale: A = no support, B = some support, C = major support, and D = extensive support.)

SYNOPSIS

The Resident Classification Scale is the principal tool used in Australia to determine levels of funding for residents in aged care facilities. The Australian Quality Matrix utilised the RCS as the foundation on which indicators of quality of care for residents with high levels of need was built. The next chapter describes the results of its trial and evaluation in one 60 bed facility, accommodating only high care residents, in a major metropolitan centre. It took place between November 1999 and January 2000.